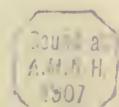


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THE OÖLOGIST,

FOR THE STUDENT OF

BIRDS, THEIR NESTS AND EGGS.

VOLUME XIV.

ALBION, N. Y.:
FRANK H. LATTIN, PUBLISHER.
1897.

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THE OÖLOGIST.

Monthly.

VOL. I NO. 1.

ALBION, N. Y., JANUARY, 1897.

WHOLE NO. 128

Wants, Exchanges, and For Sales.

Brief special announcements. "Wants," "Exchanges" "For Sales," inserted in this department, 10c or 25c per 25 words. Notices over 25 words, charged at the rate of one-half cent per each additional word. No notice inserted for less than 25c. Terms, cash with order.

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Exchange Cards and Coupons (subscription) will be accepted according to conditions stated thereon.

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THE following notices were sent in for publication prior to December last and the publisher has reason to believe nearly, if not quite all to be "live" notices at date of going to press. However, it is advisable to write the parties first, enclosing stamp or postal for reply.

NOTICE:—Will sell a 35 cal. H. T. shot gun, for cash; also have a 32 cal. revolver, good pair of opera glass, vols. 1 and 2 of *Museum*, vols. '90, '91 and '92 of the *Oölogist and Ornithologist*, a lot of other papers and some eggs to give for same. Write with stamp for particulars to R. P. SMITHWICK, Merry Hill, Bertie Co., N. C.

FOR SALE:—Copies of Cone's Key, Goss's "Birds of Kansas," Davie's Key cloth bound. In perfect condition. CLARK B. LIJAMS, 1549 24th St., Ogden, Utah.

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I WILL exchange opera glasses \$3.50 and \$5.00; scissor, 65c; torqueps, 6c; blowpipe, 30c; rules or small microscope, \$1.25 for sets or singles. L. D. SUMNER, Madison, Wis.

COLLECTORS.—If you want fine specimens of birds in the meat or fresh skins this winter, send at once for our new list. COON & BURDICK, Taxidermists and Collectors. Milton, J2t Junction, Wis.

FOR EXCHANGE:—Fragments of Aztec Pottery and pieces of shell bracelets for Indian relics, arrow heads preferred. BURT OGBURN, 321 East Jefferson St., Phoenix, Arizona.

JOB PRINTING:—Our prices are, envelopes, per 100, 40c; letter heads, per 100, 50c. All postpaid. Cash with order. LEDOUX SIEWERS, Salem, N. C.

I WOULD like Cone's Key, last edition and Samuel's book of the Birds of New England, have for exchange rare sets of eggs. ARTHUR W. BROCKWAY, Hadlyme, Conn.

FOR SALE CHEAP:—Choice A 1 sets of Southern birds eggs with data. List for stamp. DR. M. T. CLECKLEY, 457 Greene St., Augusta, Ga. -

FIELD FOTOS. We have a nice canvas bound note book for collectors who take systematic notes in the field. Strongly bound so as not to wear out in the pocket. Single copies ten cents. One dozen copies one dollar. J. T. MARTIN, JR., 775 Genesee Ave., Cleveland, O.

BEAT THIS! For ½lb. spec. any showy mineral will send large 25c spec. crinoidal limestone, *monticuliflora mammulata*, *onecallia*, *ramosa*, fine spec. *orthis biforata*, *strophomena alternata*, provided you send 10c to pay part postage. No postals, no "bum" or "snap" spec. OTTO GRADY, 93 W. Williams St., Delaware, Ohio.

TO EXCHANGE:—A few fine opals, garnets, amethysts, tiger-eyes and turquoise, also fine polished agates to exchange for good sets of eggs, a kodak 4x5 and a safety bicycle. GEO. W. DIXON, Watertown, So. Dak.

BEAUTIFUL Geodes and cave specimens (several colors), minerals, land and sea curiosities, buffalo horns (rough), Indian relics and lovely sea weed for sale. 10 varieties of fossils for 25c. CORA JEWELL, Shannondale, Indiana.

FOR EXCHANGE:—A large number of 1st class sets for same. I desire especially sets of Osprey, Barn Owl, Least and Arctic Tern. FRANK C. WILLARD, 701 N. Cherry St., Galesburg, Ill.

FOR SALE:—\$20 Bauch & Lomb compound microscope, \$8 Odell type-writer; both in good condition. Will sell cheap for cash. Send stamp for description. HERBERT GODDARD, Decorah, Ia. J2t

COLORADO MINERALS:—Silver, lead and sulphide ores, feldspar crystals and other curios for other minerals or sea shells or curios of any kind. W. H. COX, Robinson, Summit Co., Colo.

TO EXCHANGE:—A lot of common British eggs in sets at even rates for common Am. species or at a discount for particular wants. Send lists to FRANK HARRIS, LaCrescent, Houston Co., Minn.

EXCHANGE:—I have for exchange the following A. O. U. 273, 316, 339a, 420, 443, 487, 508 511, 552, 611, 622a, 703; send list. W. E. SHERRILL, Haskell, Texas.

WANTED:—*Phyllopod crustacea* in alcohol for same, or will pay cash or exchange insects or books. H. ANDERSON LAFLER, Dewitt, Neb.

EXCHANGE:—Want to exchange A No 1 eggs in sets from this locality for the same in other localities. Send your list and receive mine. EMMETT ROBERTSON, Haskell, Tex.

FOR SALE—I have southern Mockingbirds, fine singers. Any one wanting fine singers write me. All letters answered. SHERMAN SOULE, Wayland, Mo.

FOR EXCHANGE:—Three Barred Owls, for Taxidermy Instruments, or books on Ornithology, or will sell cheap. A snap for a Photographer. DEF. HALL, 801 N. Division St., Creston, Iowa.

BIRD EGGS:—A few sets and singles to exchange. All collected this season. Are first class and true to name. Lists exchanged. MORRIS RICE, 1711 Wash St., St. Louis, Mo.

WILL Exchange set No. 390, Belted Kingfisher eggs, for oologist instruments. ERNEST GROVE, Box 701, Lemars, Plymouth Co., Ia.

FOR SALE:—Singles of White-neck Raven, 2c; Great Blue Heron, 15c; Kridler's Hawk, 45c; Western Nighthawk, 15c; Western Lark Sparrow, 3c; Texan Screech Owl, 15c; Send stamp for list of others. Sets at same prices. ROY B. BRADLEY, Abilene, Tex.

FOR EXCHANGE:—Complete vols. of OÖLOGIST, *Nidologist* and *Museum*; also A 1 sets with data for Bristol steel fishing rod (tele-scope), E. F. WATSON, Kennebunk Beach, Me.

BULLETS. Shells from battlefields, Indian hatchets, axes, pottery, pestles, pipe stems to exchange for Indian relics or will sell. All answered. T. B. STEWART, Lock Haven, Pa.

TO EXCHANGE:—Double-bass over eighty years old, fine tone, good condition, with waterproof case, for good bicycle, not used over one year, or camera. ROY W. STRICKLAND, Forestville, N. Y.

FOR SALE:—An oil painting of Pikes Peak and Manitou Park. I am also collecting butterflies from this locality for sale. S. F. WHEELER, Boulder, Colorado.

TO EXCHANGE:—Singles of birds eggs, collected in New Hampshire for those of other localities. Write for list. FRANK R. SANDERS, Laconia, N. H.

CALCAREOUS tufa, petrified moss, crinoid stems, fossils on limestone, for the postage, sending 1c for each oz. Wanted, many specimens for exchange for Indian relics and good minerals; have geodes also. CORA JEWELL, Shannondale, Indiana.

FOR EXCHANGE:—A 22 cal. Remington Rifle, rim fire, for eggs in sets, also eggs in sets to exchange for eggs not in my collection. A. W. PLUMB, Flint, Mich.

DEPARTMENTAL Reports, Nests and Eggs. North American Fauna, Hooker's Natural History. Naturalists' Manual. Naturalists' Directory and others for first class sets of eggs, cash or offers. C. B. VANDERCOOK, Odin, Ill.

WANTED:—Pair of American Dipper skins, also set of eggs and nest. A No. 1 eggs and skins given and expected. E. B. PECK, York, N. Y.

FOR SALE:—A 6x9 Job Press and complete outfit, also 4x5 Kodak for rolls or glass-plates. Will sell very cheap for cash. Parties interested please write. GEO. GRAHAM, Drawer C, Gainesville, Fla.

EXCHANGE OR FOR SALE at cut rates No's 703, 594, 611, 498 etc, alto Bantam chickens, Butterfiles and horned frogs cheap. W. H. BALDWIN, JR., Greenville, Texas.

EXCHANGE: At \$18 Mandolin for a good camera, or best offer. Revolvers for best offers. LAWRENCE F. HEAPHY, M. D., 101 E. 26th St., New York City.

FIRST CLASS sets of No's 194, 337, 339, 360, 390, 467, 595, 624, 627, 674, 687, 725, 756 and others for sets. VERDI BURTCHE, Penn Yan, N. Y.

WILL SELL my single barrel Forehand and Wadsworth breech-loading 12-gauge shot-gun for \$5: original cost \$13; in fair condition. Write for particulars. W. E. CLYDE TODD, Department of Agriculture, Washington, D. C.

A COLLECTION of 225 Pacific coast and Arizona bird skins; 135 species. Price \$90. Full list for stamp. G. F. BRENINGER, Santa Crux, Calif.

WANTED to Exchange eggs. Will also buy some at $\frac{1}{2}$ or reduced prices. Please write. GEORGE QUIGLEY, 23 West High St., Lockport, N. Y.

WANTED:—To exchange sets of this locality for sets of other localities. Send list and receive mine. Only first class sets given or received. JOHN H. FLANAGAN, 29 Weybosset, Providence, R. I.

TO EXCHANGE:—A large list of fine Mounted Birds and Skins. Indian Relics, Fossils and Minerals. Wanted eggs, good cloth-bound books and a Safety Bicycle. GEO. W. DIXON, Watertown, So. Dak.

A NO. 1 set of Killdeer containing 4 eggs and set of Osprey of 2 with data for first one sending me Black Guillemot, Am. Egret, Ruff Herring Gull, Gull-billed Tern and Am. Eared Grebe. WILLIE B. CRISPEN, Box 17, Salem, N. J.

TO EXCHANGE:—The following singles for sets with data: 337, 261, 758, 622a, 488, 221, 316, 495, 441, 705, 511b, 387, 498, 704, 507, 652, 593, 721, 546, 725, 616, 467, 613, 633, 550, 120c and 126. No cards answered. Address, DR. W. M. MARTIN, Wellington, Kas.

LOOK HERE! I have just received a fine lot of ores from Montana, such as Gold, Silver, Lead, Copper, Ruby Copper, etc. Will sell cheap or will exchange some for fine Indian relics, sets or standard books. Also have 50 sets Ring-billed Gull and 40 sets Double-crested Cormorant to exchange. GEO. W. DIXON, Watertown, So. Dak.

THE following notices were sent in for publication prior to December last and the publisher has reason to believe nearly, if not quite all to be "live" notices at date of going to press. However, it is advisable to write the parties first, enclosing stamp or postal for reply.

EXCHANGE:—Eggs of this locality for eggs of others, in sets only. Send list and receive mine. J. W. SUGDEN, 121 S. 7th West St., Salt Lake City, Utah.

FOR SALE:—Send 55 cents for sample of our work in taxidermy postpaid. Only one bird sent to one person at this price. G. D. HULL, Charlestown, N. H.

TO EXCHANGE:—Volume 69 of Youths' Companion, for desirable singles not in my collection. Please send list of eggs. CLARENCE DAVIS, Branchport, N. Y.

WANTED:—A new 5x7 folding kodak. Have a 15 foot paddling and sailing canoe to offer. Also want Washburn guitar for violin and sewing machine, or part cash. A. D. DUBOIS, 327 Doyle Ave., Springfield, Ill.

TO EXCHANGE:—Birds of Michigan by Cook, also over 120 well mixed stamps for eggs in sets, Indian relics or scientific books. THOS. POTTER, Dundee, Mich.

WANTED:—Large Ostrich egg. State lowest cash price. Also have sets for exchange. Send list. OTIS TROTTER, Camp Point, Ills.

I WANT good clean copies of the *Auk*, any numbers. Would like complete volumes. Also vol. I. *Nidiologist*. For same can offer well prepared sets. Write for list. R. W. WILLIAMS, JR., Tallahassee, Fla.

FOR EXCHANGE:—A collector's cane gun, a close shooter, for a double-barrelled shot gun or cash. E. G. RUNYAN, 1008 I St., N. W. Washington, D. C.

EXCHANGE:—For best offer of 1st class sets with data. Complete file of N. S. NEWS, 1 to 66, also eggs for same. WM. H. WARREN, Lock Box #0, Danielsonville, Conn.

WANTED:—A good rapid lens for a (5x7) or (6½x8½) camera. Will give good sets for same. I have sets to exchange for sets. Send lists. HARRY R. PAINTON, College Park, Calif.

FOR SALE:—Bicycle, been used eight months, wood rim, ball bearings, \$25 cash; also Richard's shot gun cheap. Reference First National Bank. T. F. COONEY, Sterling, Kan.

FOR SALE OR EXCHANGE:—One double barreled shot gun, breach-loading and one Waltham coin silver watch. Wheeler movement, 11 jewels, in good running order. Eggs to exchange. C. B. HODGE, Sterling, Kas.

TO EXCHANGE:—Eggs in sets and single for sets of other localities, Indian relics or books. THOS. H. POTTER, Dundee, Mich.

FOR EXCHANGE:—½ horse power engine and boiler, m'd by Goodnow and Weightman, 1 muffled snare drum, 1 Sager bicycle saddle and \$80 worth of eggs to exchange. C. B. HODGE, Sterling, Kas.

WANTED:—Cone's Key, Ridgeway's Manual and Maynard's Eggs, also a thoroughly trained pointer or setter. Can offer good exchange in A i sets, singles, medical works or cheap for cash. DR. M. T. CLECKLEY, 457 Greene St., Augusta, Ga.

RARE Staurolites:—"Tessellated Crystals, a rare occurrence, am not aware of such having been observed save those at Charlestown."—*Hitchcock's Geology*, page 110. Specimens prepaid, 15¢ to \$2. G. D. HULL, Charlestown, N. H.

AN OLD stamp collection for sale for \$50; containing 2000; also 300 loose stamps for sale for \$1. KENTGEN BROS., 102 Fulton St., New York.

TO EXCHANGE:—A number of fine sets of each of the following: 637, 677, 681, 581, 583, 498, 497, 683, 423, 318, 501, 501a, 755, 339, 201, 74, 756, 610, 466, 617, 751; fine skins of 637, 677, 681, 680, 683, 658, 676, 648, etc. Wanted sets, Raptores and Warblers preferred. PHILIP H. SMITH, JR., Monona House, St. Louis, Mo.

FOR SALE OR EXCHANGE:—4x5 Focus Camera, 2½x4 Baltimorean Printing Press No. 10, 2½x4 Tintype Camera for Comet, Guitar, Mandolin, 5x7 or 5x8 Focussing Camera or offers. Cheap for cash. GEO. GRAHAM, Drawer C, Gainesville, Fla.

FOR EXCHANGE:—I have full sets of the following. A. O. U. No's: 58, 75, 123, 191, 198, 293a, 325, 728, 378, 372, 373b, 375a, 410, 420a, 443, 459a, 496, #12, 573, 578 n-4 n-5, 594, 703, 707. These are mostly of my own collecting. Will sell cheap for cash a few sets of 58, 75, 126 and 293a. D. B. BURROWS, Casa Blanca, Texas.

SWAP or SELL:—1 Pocket Kodak, 1 Kombi Camera, 12½ calibre 7 shot revolver, 1 Scott's Imperial Stamp Album, 1 Scott's International Stamp Album; also 5, 10 and 25¢ novels and comic books and papers of all kinds. For best offer in cash or Indian reliques. ROY ALEXANDER, Lock Box 345, Clarksburg, W. Va.

I HAVE a collection of about 425 first class single eggs, many very rare (partly without data) which I would like to sell. Will send list complete to any who mean business. Also a 4x5 Premier Camera (snap shot) and complete outfit for finishing 1½ dozens of pictures. Price new \$30, will sell for \$15 cash. Address all letters to J. K. AUMACK, Box 97, Ballston Spa, N. Y.

PERMO-Carboniferous and Comanche Cretaceous fossil from Kansas. 1 to 3 each of 35 species of fossils and 20 rock samples fossiliferous slabs, &c., for \$1 or half the amount for \$1. Send for list. C. N. GOULD, Winfield, Ky.

FOR SALE:—One 8x12 Columbian lever press in good condition (cost \$56) with four chases, wrenches, etc., 6 fonts type, furniture, leads, rule, stick, etc. Complete job outfit \$40 takes the whole outfit. THOS. H. BLOODGETT, Galesburg, Ills.

FOR SALE:—At a great bargain, a fine wall case 2½x3ftx1½in, full glass front, containing the following finely mounted birds, viz.: Pied-billed Grebe, Little Green Heron, Blue Jay, Scarlet Tanager, Rose-breasted Grosbeak, Yellow-shafted Flicker, Pewee, Yellow-billed Cuckoo, Hairy Woodpecker, Least Sandpiper, Am. Crossbill. These at regular prices price to over \$22. Will be sold case and all for best offer over \$7.50, purchaser paying charges. GEO. W. DIXON, Watertown, So. Dak.

TO EXCHANGE:—A genuine Dueber gold-filled, hunting case, stem wind and set watch. Made by Dueber Watch Case Co. Fitted with an 11-jeweled Springfield movement, fully warranted for five years. Have both gent's and ladies' size, brand new. Will exchange for \$45.00 worth of fine sets. GEO. W. DIXON, Watertown, S. D. M-3t.

SCIENTIFIC Skins at 1 $\frac{1}{2}$ standard prices. Have perfect skins of following, male or female, A. O. U. No's: 4, 6, 69, 71, 74, 106, 109, 131, 137, 139, 141, 142, 150, 166, 167, 172a, 178, 187, 191, 194, 201, 202, 212, 214, 219, 221, 223, 224, 225, 230, 235, 239, 242, 247, 254, 255, 256a, 258a, 263, 259, 273, 276, 289, 292a, 294a, 316, 325, 331, 332, 333, 337a, 339, 339b, 342, 357, 360a, 355, 367, 373, 373c, 375a, 378, 379a, 384, 385, 387a, 390, 393, 393d, 394, 394a, 397, 399, 402, 403, 404, 407, 409, 413, 419, 421, 424, 429, 430, 431, 433, 436, 439, 441, 447, 448, 452, 454, 457, 458, 459, 461, 462, 464, 466, 467, 498, 471, 473, 474b, e f, 478a, 481, 486, 488, 491, 492, 493, 491, 495, 497, 499, 501b, 503, 504, 505a, 506, 507, 508, 509, 510, 511b, 515, 517, 517a, 518, 519, 528, 529, 529a, 531, 533, 534, 536, 540, 540a, 540b, 542a, 542b, 546, 546a, 548, 549a, 552a, 554a, 554b, 557, 558, 559, 560, 560a, 562, 563, 567, 567c, 573, 574, 580, 581, 581c, 581e, 584, 585, 585b, 587, 588a, 590, 591c, 595, 596, 597a, 599, 607, 611a, 612, 615, 618, 619, 620, 622b, 627, 628, 639a, 631, 633, 633a, 636, 641, 645, 646a, 648, 652, 655, 656, 657, 661, 662, 665, 667, 668, 669, 674, 680, 681a, 683a, 685a, 686, 687, 697, 698, 701, 703, 706, 707, 707a, 708, 710, 711, 713, 715, 717a, 719a, 731a, 725, 725a, 726, 726c, 727, 728, 731, 735, 738, 742, 743a, 748a, 749, 751a, 753, 755, 756, 758, 758a, 759, 759b, 761, 761a, 766, 767, 768. Also nice sets with nests of most of the above species at 1 $\frac{1}{2}$ rates. EDMUND HELLER, 196 Rubidoux Ave., Riverside, Calif.

"AUKS" Wanted.—I will allow 50c each for any back number of the "Auk" you may have, if in good condition and sent prepaid. You to take your full pay in Bird skins, Eggs, Shells (showy or scientific), Corals, Echinoderms, Fossils, Minerals, Indian Relics, Curios or Novelties as listed in the Premium List Supplement. I can also use on same terms the following Numbers of the OOLOGIST at prices quoted: June, 1888, 25c; July-Aug., 1886, 52c; Jan.-Feb., 1887 or Dec., 1886 with same attached, 20c; June-Sept., 1887, 15c; Apr., 1889, 12c. All must be complete, clean and in good condition. I will also accept back No's of the *Ornithologist* and *Oologist* or *Nidiologist* any issue and in any quantity at 5c per copy on same terms. I can also use books on subjects pertaining to Natural History if in good condition and cheap, also A No. 1 sets of eggs with data at 1 $\frac{1}{2}$ "Standard" rates. Lists of books and eggs must be submitted for my selection or approval before sending. Address at once FRANK H. LATTIN, Albion, N. Y.

WANTED to exchange with advanced Oologists the present season. Can offer southern sets. Choice sets for singles of 25, 104, 112, 183, 188, 204, 205, 206, 328, 336, 352, 356 and Emeu. DOCTOR M. T. CLECKLEY, 457, Greene St., Augusta, Ga. A-3t.

DAVIE'S "NESTS and Eggs of North American Birds." I want good new or 2d hand copies of either the 3d or 4th editions. Will pay cash or give good exchange. Write stating what you want for your copy. FRANK H. LATTIN, Albion, N. Y.

"NATURAL SCIENCE NEWS." Vol. I complete. Less than ten complete vols. left. Will send you one for only \$1.00. Vol. II complete, 14 No.'s, only 30 cents. Complete your files. Will furnish Nos. 1 and 2 at 10c each. All others 5c each or in lots of five or more 4c each, or ten or more 3c each. (Nos. 1 and 2 are always 10c per copy net.) FRANK H. LATTIN, Albion, N. Y.

NOTICE TO TAXIDERMISTS:—*Gipsy*, the famous man killing elephant to be electrocuted in Chicago, will be mounted here. I have arranged to give lessons on her to a few assistants. Those wishing to take the course should correspond with me at once. PROF. WM. ALANSON BRYAN, University of Chicago, Chicago.

ORNITHOLOGY, OOLOGY, ENTOMOLOGY, MICROSCOPY, GEOLOGY, MINERAL- OGY, ETC.

Gleanings from Advance Sheets of the "American Newspaper Directory" for 1896.

Among the papers in New York devoted to above subjects, none has credit for so large a regular issue as is accorded to the OÖLOGIST, published monthly at Albion, and the publishers of the *American Newspaper Directory* will guarantee the accuracy of the circulation rating accorded to this paper by a reward of one hundred dollars, payable to the first person who successfully assails it.—*From Printers' Ink, issue of April 22d, 1896.*

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Many Subscriptions to the OOLOGIST have expired, or will expire with this issue. In the future the Publisher requires CASH IN ADVANCE. Hence, if you are one of the delinquent subscribers, your subscription should be forwarded by return mail, if you wish the OOLOGIST continued to your address.

February issue will go to press promptly on Feb. 1st, and be mailed during the first week of that month--- all Exchanges, advertisements and notes for that issue, must be forwarded by return mail to insure insertion in that issue.

THE OÖLOGIST.

VOL. I NO. 1.

ALBION, N. Y., JANUARY, 1897.

WHOLE NO. 128

Something for the "Oölogist."

There are doubtless few readers of the OÖLOGIST who have not at times felt impelled to write something for this valuable magazine. These moods often come upon me, at least, and it is with this burden on my mind that I take the typewriter and attempt to write "something for the OÖLOGIST," trusting for inspiration to produce something valuable, instructive and interesting. It has impressed me that the present need of ornithology is clear, definite accounts of one find, or of one bird, its nests and complements of eggs, rather than lists of finds which state no particulars or data advancing the knowledge already recorded about the birds mentioned. The latter will perhaps satisfy mere collectors, but progressive naturalists want more instructive details. In my earlier days I wasted much ammunition firing into the large flocks of blackbirds passing over my head, but I never did much execution until I learned to pick out a victim upon which to concentrate my fire, and thus I often secured other birds besides the one which I had selected. I believe that a careful description of one nest and its contents is of more scientific value than simple notices of many finds. We need more tangible information about the birds we now know in an indifferent sort of way. The recorded knowledge about many of our commoner birds is surprisingly small, and part of what we have is needlessly inaccurate, or based upon data gathered from localities so different from the districts within our reach that the facts are largely unserviceable.

Early last spring I became interested in the actions of several pairs of Sparrow Hawks, and on referring to my files of the OÖLOGIST for the approximate dates of nesting, I was surprised to find nothing of value except from Florida and California, where the nesting season opens so much earlier than in Illinois that the information was of no service. On consulting Davie's Nests and Eggs, an invaluable book for the student of ornithology, I found the very definite statement that the eggs of this species are usually deposited in April or in the first part of May, a period embracing time enough for the birds to rear their broods and leave the nest. The result was that I broke up one nest by investigating it too early, and allowed another set to become badly incubated before I decided to disturb the nest. The Sparrow Hawk is perhaps one of those common species, which are too well known to admit of their being written of in ambitious journals, but I am so constituted that I need more facts about this class of birds.

My only find of value thus far this season has been a nest of the Red-tailed Hawk, my first set of this species, and what can be of more interest to the novice in collecting than his first set of Red-tails? The nest was in a large tree about forty rods away from a house in plain sight of the farmer's family, who often observed the loving demonstrations of the pair while they were preparing the premises for their occupancy. The nest was a structure of former years and evidently needed little repairs for the simple tastes of the rugged pair, a few wisps of dried grass and several

pieces of corn husks being the only garniture added by the new residents. The site was a lofty shagbark hickory on the summit of a small slope covered by five or six acres of thin woods, the nest being visible from all sides as a sort of watch-tower, a veritable crow's-nest of observation. At night both birds were frequently observed to sit side by side on the nest when the place was first selected, but later the female (apparently) would occupy the nest at night while the other bird would take his station on the obliquely ascending branch below the nest near his mate.

On March 21 I visited the nest in company with a boy who had volunteered to do the climbing, for those who read my last article will remember that I am not a success in that line. My companion was raised in a river bottom in Missouri and had had no experience with climbers, but his practice in coon hunting had qualified him for the task before him and he showed no hesitation in attempting the ascent, preparing for it by removing his shoes and coat, and biting off a mouthful of the Missouri Twist he fished out of his pocket. I gave him careful injunctions about how to pack and lower the eggs, and then took my place on the anxious seat while he clambered up a grape-vine which partially entwined the trunk for about thirty feet and was anchored to a strong branch at that height, where the real work of climbing would begin, the trunk being too large to assist him in the ascent below the distance mentioned.

On reaching the first limb and resting long enough to recover his wind he pulled away the downward projecting bark until he could advance to the next favorable limb, and thus ascending he soon reached the nest, which was placed in a fork of a branch ascending at an angle of about forty-five degrees from the main stem, the nest being about eight feet out on this branch.

Throwing his leg up over the edge of the nest and looking into it he announced "two eggs," and prepared to pack them according to the directions I had given him. The cavity of the nest was shallow, being one inch and a half deep and ten inches across. After lowering the eggs, he tied a knot in the rope at the top of the nest, and when afterward measured the distance was found to be ninety-five feet. The eggs were quite fresh, one measuring 2.44 by 1.90 inches, the other measuring 2.42 by 1.95 inches. They are pale bluish white and are fairly well marked with irregular blotches of cinnamon and cherry brown. One of the eggs is marked more strongly on the half near the larger end, while on the other egg the spots are more numerous on the half containing the smaller end.

I wonder how many of the thousands of readers of the OÖLOGIST are familiar with the higher literature of ornithology, or of that class represented by writers like Olive Thorne Miller, John Burroughs and other sympathetic writers of birdlore. The latter mentioned essayist is now being read and studied by the school children of America and the coming generation of ornithologists will not be so easily deceived as this one was, apparently, by the article in the February OÖLOGIST entitled "Destruction of Birds." To criticize the production of a fellow-contributor may not be in good taste, but there is an unwritten law of ethics which should reach anyone who imposes upon the many as well as the one who deceives a single individual. Not many months ago I was pained to read that a well-known collector, with whom I had negotiated several exchanges in the past summer and whom I found perfectly reliable and prompt, was regarded as a fraud and his name was published as such. He had probably imposed upon a fellow collector in exchange, but when a contributor to the OÖLOGIST im-

poses upon the readers of this magazine the best of John Burroughs' essays as his own, without using a single quotation, he should explain the remarkable parallelism of thought exhibited. This criticism is given charitably, but justice to the readers and contributors of the OÖLOGIST demands that such things shall not pass unnoticed when known.

The recorded occurrences of the Harris Sparrow in Illinois are so few that I desire to notice my capture of two individuals of this species in this vicinity, reports of which were sent to the *Ornithologist and Oologist* about the time that journal ceased to circulate and hence my notes remain unpublished. My first specimen was taken shortly after sunrise on the morning of September 28, 1893, while I was out collecting birds for the examination of my class in zoölogy. I was walking along the bushy edge of the woods near a creek, when I observed two birds unknown to me flitting ahead of me in company with a Hermit Thrush and several Brown Thrashers. I secured one of the two strangers, but as my time was limited I allowed the other Sparrow to escape. On examination of the bird and after consulting my Natural History Survey of Illinois, Ridgway, I identified the specimen as Harris's Sparrow, which Ridgway describes as quite rare in this state. Thinking that I had made a mistake, I used Coues' Key, and again ended with the same result, so recording it in my journal.

On the morning of Nov. 11, 1893, at about the same time of the day I secured another bird which I again decided to be this rare species, this one being taken along a hedge in the edge of the village, where it was flitting with migrant Sparrows. I now decided that either I was extremely lucky in thus finding this rare species again or that my identification was at fault, and sent this individual to the Department of Agricul-

ture for identification, receiving notice in due time that I had correctly placed the specimens. I believe that a closer observation of the migrants of this region would show this species far less rare than it has been reported.

P. M. SILLWAY,
Virden, Ills.

From Venezuela.

EDITOR OÖLOGIST:

I promised your readers in my letter to your paper from Port of Spain that I would try and send them some word from the delta of the Orinoco. Perhaps that letter may not have reached you for the boat, the ill fated Juanaddy, which brought our party out from New York, struck on the rocks off St. Kitts on the return trip and I have not learned whether or not the mail, with our letters for the States was saved. However as our party is settled for a time in camp at a place called Sacupana and I have leisure this morning I will communicate a few general notes relative to the ornithology of this region.

For the benefit of those who may be interested in knowing, I will say that though they can find Sacupana given on the maps of Venezuela as a city there is no town here. Not a single person, black or white, resides here and all we found in the shape of a habitation was a deserted Indian hut, which we are at present jointly occupying with tarantulas, centipedes, scorpions, snakes and a host of rats, toads and insects numerous in species as well as numbers.

I confess I hardly know just how to begin. I could speak of numerous adventures and experiences on the different channels of the Orinoco, in the woods and in camp, which my search for ornithological lore have led me into. I might tell of having my canoe upset by a large manatee and of losing

my gun, revolver, hunting knife, ammunition and medicines, besides money and other things, specimens, etc., in the river and after a desperate struggle in the swift waters, of reaching the bank, wounded by the vicious Caub fish, to be poisoned by some noxious plants and picked up a few hours later more dead than alive by a chance boat. But of these things I must speak later, if at all, and now I will tell of a few of the many birds I have encountered in this land of perpetual summer.

Perhaps the birds best known in the North and which are residents here, are the Parrots, Macaws and Parroquets. These birds abound in great numbers in this vicinity and it is no uncommon thing to see a dozen Macaws, both red and yellow, in the trees around our camp. Those who have known them in their haunts or even seen them in their captivity will have no trouble in recalling their harsh cry. This varies in tone according to the desire they wish to express. It is interesting to stand under a tree occupied by several of these birds when they are unaware of your presence, and I assure you they will not long occupy a tree if they are aware you are beneath it, and note their odd manœuvres while you listen to their very expressive Macaw talk. Thus I have watched and listened to them many times and anyone who does not believe that animals have a separate and distinct language of their own would be convinced of the fact if they could share the opportunity I have enjoyed in observing this one bird. Standing under a tree thus employed I have heard the Macaw's note of alarm as I made some movement which the sharp eyes of the bird delected. It would be answered by the others, when if I made no further sign of my presence, some one of the birds, using beak and claws, would climb down to the one which had first uttered the warning and they would confer,

with beaks together, in a soft murmuring tone. Then they would both sharply scan the place of my concealment. After another beak to beak conference they were seemingly satisfied that no alien was near one returned to its unfinished guava and the other climbed back to its perch, and all the others, which had been waiting ready for flight, resumed their feast. If space would permit I could recount other equally interesting conversations between the Macaws which I have overheard.

The green Parrot, common in captivity in the States, is very common here in its native state. Get enough of them together and I am sure they can out-scream the Macaws. Their voice is not so harsh and loud as that of the Macaw but it is higher and more piercing, and a dozen or more of them screaming together can make as discordant a medley as I ever listened to. You all have heard of Pigeon flights, but who ever saw a flight of Parrots, when thousands of birds could be seen overhead and on each side while behind was a line as far as the eye could see. About five o'clock one morning I witnessed the beginning of such a flight and when darkness shut down the Parrots were still coming and how long after this swarm of green plumaged birds continued I have no means of knowing. From whence they came and whither they departed I know not either.

The pretty little Parroquets or "love birds," as they are often called, are quite often seen in flocks of from ten to twenty. This is contrary to the rule with Parrots and Macaws, which, no matter how many there are together seem to associate more closely in pairs.

I would say more but my letter is already quite long enough for this time.

LESLIE O. DART,
Sacupana, Venezuela, S. A.
May 21, '96.

A Colony of Woodpeckers

Near to the edge of the great Potter Swamp in Yates County there is an area of about one acre covered with a dense growth of cattails and swamp grass and grown up mostly with ash trees many of which are now dead stubs broken off at various heights thus making a typical place for the family of *Picidae* to breed.

On May 19, 1895, accompanied by Mr. Verdi Burtsch I visited this place and after about three hours' observation we found that of the seven species of Woodpeckers indigenous to Western New York five were breeding in this small area; therefore we have dubbed it "Woodpecker Colony."

Flicker, *Colaptes auratus*. This familiar "Yeller-hammers" loud and rolling notes were apparently in all directions and were the first to attract our attention. Two nest holes were found and I took a set of 9, fresh to slightly incubated eggs from a cavity 15 feet up in a large bumpy old stub. This gnarled bumpy stub seemed to be a favorite one for cavity breeders to select, for two feet above the Flickers' hole was another occupied by a pair of Bluebirds whose home I did not disturb. Also on May 24, 1896, Mr. Burtsch took a fine set of 4 eggs of the American Sparrow Hawk from an old cavity 30 feet up in the extreme top.

RED-HEADED WOODPECKER, *Melanerpes erythrocephalus*. This tri-colored Woodpecker—whose querulous notes remind one of a tree frog—was to be seen dashing from tree to tree and we found one nest hole in the dead top of a beech tree and 25 feet from the ground. The cavity was 15 inches deep by 6 in diameter. The set of 5 eggs were fresh and one was a runt. I took another set from an old dead cherry tree 20 feet up and in a cavity 12 inches deep by 5 in diameter at the top while the bottom was considerably larger. The set of 5

fresh eggs were laid on fine bits of rotten wood.

DOWNTY WOODPECKER, *Dryobates pubescens*. But one pair of this social little Woodpecker were found breeding in 1895 and as Mr. Burtsch collected the set I haven't full data. But on May 10, 1896, I took a set of five eggs from a smoothly chiseled hole 20 feet up in a small ash tree—it was 8 inches deep and the opening so small that Downy had to squeeze in order to get in and out. I had previously, on May 3, dug a small hole into the bottom of this nest hole but as only one egg had been laid I jabbed a small limb into the hole I had made and Mrs. Downy completed the set. Again on May 24 I took a set of five fresh eggs from a cavity 20 feet up in a live ash tree, probably the second set of this pair.

HAIRY WOODPECKER, *Dryobates villosus*. We found two pairs breeding. Spying a rather large cavity in a live ash tree I approached and gave it a vigorous whack, and the effect was truly astonishing, for out of the bowels of that tree came the most unearthly shrieks and screams I ever heard. I amused myself for several minutes and as soon as the last shriek died away I would give them a hearty "encore" and they would sing the next verse. Davie says that Hairy lays four eggs, rarely five, but judging from the sounds within there must have been at least a dozen. Both of these cavities were in solid ash trees and 15 feet up.

YELLOW-BELLIED WOODPECKER, *Sphyrapicus varius*. Mr. Burtsch found a nest hole of this unsuspicious Sapsucker in a partially dead ash. Mrs. Sapsucker came promptly to the entrance on hearing raps without and as Mr. Burtsch climbed to the cavity she ran up and down the tree near the hole in a nervous manner but soon flew to a near by tree while he dug into the nest, but alas! we were too early for no eggs had been laid. Hopefully we visited

the "Colony" again but the pair had deserted the locality.

Although the Yellow-bellied Wood-pecker is a fairly common migrant it rarely breeds in Western New York therefore the taking of a set of their eggs here would have been of unusual interest.

Potter Swamp is our main collecting ground. We have hunted along its edges, explored its jungles and went astray several times. At the south end the rookery of the Great Blue Heron looms up in the highest ash tree and near here we have taken sets of the American Bittern, Rails and Marsh Hawks. Farther on we come to the "Woodpecker Colony" and it is near here that the Scarlet Tanagers, Rose-breasted Grosbeaks and Maryland Yellow-throats breed. There is much to learn of the "avi fauna" in its sylvan retreats, therefore you may again hear from yours truly,

C. F. STONE,
Branchport, N. Y.

The Passenger Pigeon.

Among the birds becoming rarer each year is the Passenger Pigeon (*Ectopistes migratorious*), especially so in Minnesota. On the twenty-first of June, '95, it being a very bright day, I took my kodak and wandered out in the woods back of what is known as Oak Park, in Minneapolis. I was sitting on a log near the outer edge of the woods, listlessly thinking. Imagine my surprise when a Passenger Pigeon alighted on a limb not twenty feet from where I was sitting. It did not stay there long however, but flew farther into the woods. I followed the course it took as nearly as possible, examining every tree carefully. I had probably gone about two hundred yards when I found the mate upon its nest, which was situated in a red oak tree.

The nest was unusually high, being about twenty feet up, in the fork of a

horizontal limb. It was a very frail structure, consisting of a few long sticks, not quite as large as a clay pipe stem, on which were placed still smaller sticks, also two green leaves. It had one very badly incubated egg in it, which was pure white and nearly oval.

After marking the spot I went home for a shot gun to procure the birds. I got the female and egg and consider it one of the richest finds of the season.

I have not read or heard of the Passenger Pigeon being reported breeding in this state for several years, and am almost positive there has not been a set taken in Hennepin county within the last three years.

On dissecting the bird I found the stomach contained three acorns, several grains of wheat, also a number of white berries.

As near as I can learn (in former years) about the fifth of April is the time of their arrival and they have principally left the country by the first of November, although individual birds remain as long as the abundance of food is uncovered by snow.

OLIVER V. JONES,
Minneapolis, Minn.

The Wheaton Ornithological Club.

On the evening of Oct. 14, 1896, at the Ohio State University, Columbus, O., a club was organized for the purpose of systematic study and research in ornithology and oölogy. Fifteen names of professors and students were enrolled at the first meeting and the future of the society looks very promising. Raymond C. Osburn was elected president, E. B. Williamson vice-president and J. B. Parker secretary for the ensuing year.

The club was named in honor of the late Dr. J. M. Wheaton, of Columbus, whose extensive collections of skins and eggs he bequeathed to the university.

THE OÖLOGIST.

A Monthly Magazine Devoted to

OÖLOGY AND ORNITHOLOGY.

FRANK H. LATTIN, Editor and Publisher,
ALBION, N. Y.

Correspondence and Items of interest to the
student of Birds, their Nests and Eggs, solicited
from all.

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THE OÖLOGIST.—The missing issues will
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be issued to catch up, but all unexpired sub-
scriptions will be extended seven months, in order
that they will receive the full number of
Oöologists to which they are entitled. All new
subscriptions received since May 1, '96 will be-
gin with this January issue.

Yellow-throated Vireo.

FRIEND LATTIN:

As good a journal as is your Oölo-
gist, it has, nevertheless, its defects.

I supposed that there was no North
American bird that had not at some
time or other been written about in the
columns of the Oölogist, but I was
very much surprised last night to find
that from Vol. I, No. 1 of the *Young
Oologist* down to date, it has never con-
tained an article on the Yellow-throated
Vireo. Now why is this? Isn't there
anyone who knows enough about this
pretty bird to write an article about it
for the Oölogist? I wish you would
please have this matter attended to, and
for my own especial benefit, have
someone write such an article. I want
to know more about this bird.

Before closing I will tell you about
the queer and unusual nesting-site of a
pair of these birds. I took a nest con-
taining four eggs and one of the Cow-
bird on Thursday last. The nest was
in a small elm, which happened to be
growing right in the midst of our foun-
dry plant, with the noisy turmoil of
machinery and workingmen on every
hand. Close on one side of the nest is
a wagon-road, over which heavy teaming
of coke and iron is almost constantly
being done, while on the other side,
and within a few feet is the pipe store-
house where cast-iron pipe is being
blacked and piled all day with consider-
able noise, and where workingmen
are continually passing to and fro right
near the nest. Yours quite materially,

NEIL F. POSSON.

Medina, N. Y., June 9, '96.

P. S. Saw a Yellow-breasted Chat
Memorial Day.

Notes on the Yellow-billed Magpie.

The Yellow-billed Magpie is a com-
mon bird throughout California, and is
resident wherever found, never migrat-
ing to any extent, although in winter a
few will straggle a few miles from the
plains into the foothills, but never for
any length of time. They frequent the
level plains and valleys of California,

nesting in rookeries in the small groves of white oaks and sycamores which dot the meadows. They nest early; complete sets may be expected as early as March 31, and young birds have been taken at that early date. The nest is usually placed well out of reach, either in the tips of a horizontal branch or in the extreme top of the tree, but this is not always the case, many being built in the center of the tree, and once or twice I have found them on a horizontal limb or in a crotch. The nest is an elaborate affair, and is very frequently built on the remains of last year's nest. The foundation is laid of a batch of coarse twigs, averaging larger than a lead pencil, and very frequently are broken from living trees, as I have found them, in new nests, with fresh broken ends. The structure is then cupped with a solid, large cup of mud or horse-dung, with humerous twigs imbedded in it. This cup is generally about 7 or 8 inches in internal diameter and 5 or 6 deep, with walls about 1 inch thick.

The interior is lined with a thick coating of very fine, hair-like grass-stems and horsehair and the whole is surmounted with a latticed dome of coarse twigs, in some cases two feet in height, but generally from about 10 to 15 inches, with a hole in one side for entrance. The Magpies spend a long time building their nests. Nests well under way in the fore part of February will not have the eggs until the first or second week in April.

On March 31, 1895, we made our first trip to the rookery near here. Owing to the late rains the birds were not quite ready for us, so we secured but one set of eight fresh eggs, which were taken from a large nest about 50 feet from the ground in a small oak. Several nests held "sets" of from 1 to 4 eggs which were left for future visits.

On April 7 we again were on the scene bright and early and at once

commenced operations. The first nest I examined was in a small white oak, in the topmost twigs and about 30 feet from the ground and held eight fresh eggs. After packing up I tackled the next one. This was in a giant white oak and situated in the extreme tip-twigs of a nearly horizontal branch about 40 feet from the ground and held six fresh eggs. On returning to this nest a week later I found the bird had one more egg. This was all I got that day though my two brothers each got a set or two.

On April 10th, at another rookery, I took a slightly incubated set of five from a nest in a white oak 30 feet up, and a very highly incubated set of five from a locality very similar. In fact, of over 30 nests examined in April and May, '95, all, with one exception, were placed in white oaks, at heights varying between 20 and 60 feet. The exception was one placed at the top of a locust tree, and at the risk of making a pin-cushion of myself, I took 7 highly incubated eggs from it on May 18th.

On April 14th we again visited the rookery, this time with better success. The first nest examined was in an oak about 30 feet from the ground and held 7 fresh eggs. The next was similarly situated and held six very slightly incubated eggs. One nest was found to contain six young birds. On summing up we found we had four sets of six, four sets of seven, and two sets of eight, all either fresh or very slightly incubated.

On April 21st took one set of seven, incubation nearly $\frac{1}{2}$, two of six, incubation nearly $\frac{2}{3}$, one of seven, incubation $\frac{1}{2}$, one of eight, incubation $\frac{1}{2}$ and a fresh set of six. The latest set taken was a set of six, about $\frac{1}{2}$ incubated, on May 29. Of over 30 sets examined, none were larger than eight or smaller than five in number, and the greater were of six and seven eggs. The eggs show great variation in size, markings

and shape. Some taken were short and rounded, others long and elliptical. Again some would be heavily blotched with lilac and buffy or purplish brown, while others would be minutely dotted with lilac, buffy and grayish brown. The markings are distributed over the entire shell. The average size is from 1.20 to 1.40 x .90 to 1.00.

In coloration the Yellow-billed Magpie is a beautiful bird. The plumage of the head, neck, breast, back and scapulars is a deep lustrous black, in high plumage with an iridescent tinge on the cranium; the belly is white; wings and tail black glossed on upper side with a beautiful greenish and purple iridescent gloss, which attains highest development in November, December and January, becoming duller and less noticeable as summer advances, till in the latter part of the summer it is hardly noticeable: a large wing patch and the lower border of scapulars white; feet black; iris brown; bill and skin about eye rich yellow.

The size of the adult male will be about 19x23x10. An adult female will be similarly colored, but decidedly smaller, averaging about 18x21x8.75.

The Magpie is a proverbially noisy bird. A group of three or four talking to each other can make noise enough for a dozen. He is an arrant thief and will steal and eat anything, worms, fruit, eggs or carrion. They are very fond of ripe figs and can always be found in the fig trees. They are also very partial to eggs and are the continued objects of vituperation for the turkey raisers and farmers. One man I know of covered the entrance to his hen-house with a sack, hung like a curtain, and treated each nest in like manner and then taught his hens to go in under the curtains to lay! He said that was the only way he could get an egg to eat!

The Magpies are very wary of man and will keep well out of shot gun

range, though easily approached on horseback or in a buggy. Their flight resembles that of a Jay and their appearance on the ground is rather hideous. They hold the tail at an angle above the horizontal and strut about with a pompous air.

I caught a half-grown Magpie last year and tried to raise him by hand. His appetite was something enormous. He soon got so he would open his mouth and squawk whenever he heard a footstep, so we called him "Oliver Twist," and he thrived on a diet of bread and milk, dry bread and egg and cornmeal. But one day he took cold and passed in his checks.

They are said to be gifted with the power of speech, on condition there is an operation performed on the tongue, but as I never could find out whether the cord below the tongue was cut, the tongue slit, end cut off or tongue cut off altogether, I have never experimented.

HENRY B. KAEDING,
Amador Co., Calif.

I noted a set of 1-9, fresh, April 21, '96, the only 1-9 set I have ever found: also 1-1, incubation $\frac{1}{2}$!! Probably a Jay got the others, but this single egg was being incubated.

H. B. K.

A Peculiar Site for an Oriole's Nest.

Last June, in the grounds of my Southern California home, a pair of Hooded Orioles took a queer fancy to build a nest suspended under a banana leaf, growing from a tree some 20 feet high, near my veranda. Now to those unacquainted with the banana plant I will say that the leaves are often several yards long and more than a' foot wide, and presenting as they do a broad surface to the wind, they become very much tattered and frayed by the time they are fully grown. But Mrs. O. did not know that apparently, for after having critically surveyed the situation

for a few days she commenced to work, the male taking no part in the construction of the nest, but keeping conveniently near, and both uttering their rapid *chu-chu-chu* incessantly.

Her only material was the fibrous strings from the leaves of the fan palm growing near by. These strings are as strong as common sewing cotton and many of them a yard in length. The nest was placed about midway of the leaf and about 10 feet from the ground.

I did not see the first day's work, but my attention was attracted to it from the balcony above, by seeing her in the most intelligent and skillful manner puncture a hole from the *under* side of the leaf and push a string through, then come around to the *upper* side and pull it through, fastening it with a loop, for a guy. She fastened several other guys, and then proceeded to build quite a massive affair of woven and twisted palm strings, the whole structure about six inches long, the nest itself about three inches deep; the remaining three being solidly packed with the strings.

After a week or more of work the nest swung gaily out from under its green canopy. Swayed by every breeze, a high wind often tossing the leaf perpendicularly in a way which to any but an oriole would have been perilous enough; but she trustingly deposited four eggs in it and in due time they were hatched. But as I had anticipated the leaf became torn and broken and things began to look insecure; and one morning I found her guy strings broken loose and the nest dangling at an angle of 45 degrees, with a young bird dead on the ground. With step-ladder and twine I righted and strengthened it, and the remaining three were reared in safety.

M. L. DODGE,
Chula Vista, Cal.

Incubation.

A year ago in marking the degrees of incubation on the several eggs of several good-sized sets of water birds, and in subsequently comparing the eggs in each set with one another, I made what was, for me, a partial discovery. Namely, that variations of incubation—degrees, in the same sets of eggs are probably much more common than we are accustomed to suppose.

This, by consequence, follows—that when the data for certain sorts of eggs are marked,—“Incubation advanced”—the information is scientifically misleading. Of course absolute scientific accuracy is unobtainable, in a necessarily abbreviated data, but a reasonable approximation to accuracy should always, without question, be sought by every really scientific collector.

Following up the practice begun upon my Heron eggs, and gradually abbreviating, to save precious time, I have gradually formulated a code of incubation marks, which would, I strongly believe, if widely adopted, carefully used and uniformly applied, give added interest to many a set of otherwise apparently uniform eggs, and throw considerable light upon little-known conditions, connected with the incubation of eggs. My plan is this:

In blowing eggs, of all sizes, I try to note, very carefully, the exact condition of the germ. If the egg be absolutely fresh—which comparatively few eggs are—the egg, if a good-sized one, is marked with an “O” beside the blow-hole, while, if the egg be small, the note is made on the field-book. If there be the faintest trace of blood the mark is “b;” if this condition is well pronounced the mark is “B;” if the embryo is visible an “e” is inscribed on the egg; a fairly large, soft embryo is marked “E;” while a large, tough one is honored with an “a.” And then, if

the young thing have a little down started, the mark is "A." This is about as far as one can reasonably go; but since even a whilom set of eggs, that is almost ready to hatch may, if rare, be saved by the enthusiastic collector, such eggs might be appropriately marked "c," that is practically complete, or "C" if absolutely so.

The complete code then would be as follows: "O-b-B-e-E-a-A-c-C." But one further mark remains to be considered, yet that nearly the most important of all—infertile eggs should be marked with an "I."

The value and significance of such a code may partially appear by the citation of an actual entry in my note-book for the current year, opposite a set of Sora, the eleven eggs of which are marked, respectively, "O-b-b-b-b-b-e-e-E-E E." Another set of thirteen eggs tells this story, "O-O-O-b-b-b-B-B-e-e-e."

The adoption of a code like this would be practically useless, unless such adoption should become practically universal. The problem then of securing such uniformity would be overwhelming, but for the hope that the fathering of this little suggestion by our dear little OÖLOGIST may impress the value of the idea upon a sufficient number of thinking oölogists to give the idea a good start.

If the thing "takes," as the politicians say, this might, perhaps, be a wise method of bringing the code into use. Until the code had come into wide use, and had become well understood, a whole line, or even two, on the data might be given up to the item "incub'n," each abbreviation being fully explained. Then, in filling out the data for, we will say the larger set of Sora mentioned above, the collector might set down over the "O" a "3;" over the "b" a "4;" over the "B" a "2;" and over the "e" a "4." Indeed this "3-O-4-b-2-B-3-e" style of abbreviation might

profitably be used in any case.

Readers of the OÖLOGIST will surely understand that I am not at all wedded to this particular code. Any other, which should give the same information, in more compact and scientific form, would be gladly welcomed.

What I am aiming at is the adoption of some uniform, simple and reasonably accurate system of symbols, easily and quickly markable on eggs, which system will tell us, with reasonable exactness, just when, relatively, the bird begins to sit, and how uniformly she sits, with other allied and equally valuable information otherwise unobtainable.

"Too much bother," somebody growls. Yes, perhaps, my dear fellow; but you are not the sort of collector to whom this sort of communication is addressed.

P. B PEABODY,
St. Vincent, Minn.

Pinnated Grouse in the Pine Regions.

During the latter part of September I went upon a journey into a rather unsettled region seventy-five miles north of Minneapolis. I did not go in pursuit of birds alone but made observations as I journeyed.

We traveled by wagon and by foot as much as fifty miles and along the route I many times saw the Pinnated Grouse. As the character of the country was such that I did not expect to see this bird I give a short description of it.

A small river watered the region through which we passed and along its banks, and occasionally in tracts away from the stream, grew beautiful forests of tall maples. But the whole country is, for the most part, known in lumberman's parlance as "pine slashings." The better timber has from time to time been felled leaving here and there a mammoth which for some reason was not cut. Fire later swept this territory

but despite it all many trees still stand though scattered and lifeless. They are so towering and limbless that a distant view gives them the appearance of many mast-heads outlined against the horizon. Raspberry bushes and sprouting poplars (the last of which I anticipate will sometime grow to a forest) cover the ground and curl about the fallen logs. The land is slightly sloping, though in places the marks of the Great Glacier can be seen in pinched and rather barren ridges, and between every slope the alluvium has been washed down by the rain for ages until well grassed meadows have been formed.

As I passed along I very often saw a Pinnated Grouse whirring over the ground and toward night-fall when the birds shift, several flocks flew by. One that sat in the road was so tame that the hind wheel of the wagon had nearly touched it before it moved away from the roadside.

The driver said that it had been only three or four years since the advent of this bird into this country and that since then they had increased very rapidly. Upon the day the closed law for shooting expired there was an abundance, but incessant hunting by sportsmen and by Indians and especially by men shooting for the market had greatly thinned them.

It was easy to see why the Prairie Hen should choose this place as a home. It was practically open land and not forest and the bushes gave the birds good covering to hide under. Then also they like to spend the warm noon-days in the grass of the meadows and they found ample opportunity to do so here.

The early habitat of the Pinnated Grouse was all of the territory west of the Alleghanies. Even as late as the early history of Minnesota I learn that they were not at all common so far west. The Sharp-tailed Grouse was

then the prevailing species, but gradually the latter bird shifted away from us and the Pinnated Grouse came in. That bird too has shifted until they are far more abundant to the west of Minneapolis.

It is the general belief that this Grouse is an inhabitant of the prairie lands of the west, or lands that are partially prairie, and led by this belief I did not expect to find them in the pine regions.

There are doubtless many tracts, as I have already described, in the great forests of the northwest and the north in Canada, which would as readily serve for the home of the Pinnated Grouse as the one I have before mentioned, if they are not so already. The soil upon which pine grows is generally poor and these regions are not destined to become so rapidly settled by farmers as the more fertile prairie lands and it is possible, that, with the gradual settlement of the prairie regions and the consequent persecution of the Prairie Hen, this bird may come to seek a home in these wilder places.

H. M. GUILFORD,
Minneapolis, Minn.

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FRIEND LATTIN:

Please discontinue my adv. in the OÖLOGIST, as I am just about to start on a collecting trip to be gone until summer. Can you kindly give my correspondents notice through your paper? My post-office address is "McLoud's Post, Houkan, Jackson's P. O., Alaska." Will get mail once a month so send the OÖLOGIST there for the present. I am in for a big time—lots of rare birds—and a breeding resort in summer.

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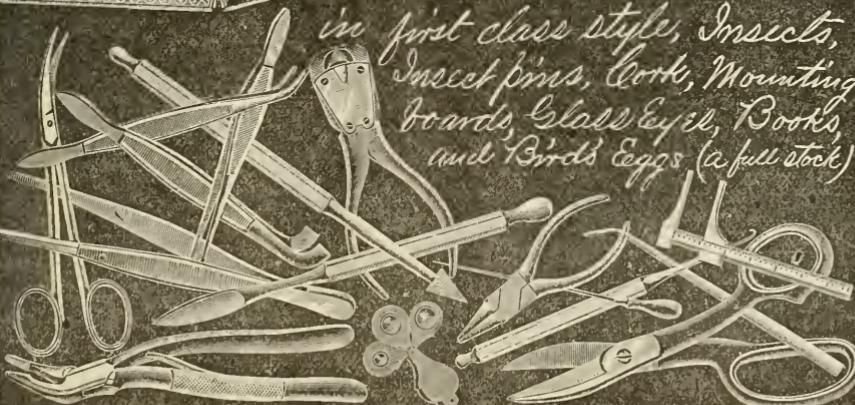
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No. 13

THE OÖLOGIST.

Monthly.

VOL. XIV. NO. 2.

ALBION, N. Y., FEBRUARY, 1897.

WHOLE NO. 129

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ERNEST H. SHORT,

ALBION, N. Y.

THE OÖLOGIST.

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ALBION, N. Y., FEBRUARY, 1897.

WHOLE NO. 129

Notes on the Virginia and Sora Rails.

These interesting water birds are very common summer residents of Tonawanda Swamp, wherever there is a wet marsh, or any other place that is covered with water, in which coarse grass, sedges, or cat-tails are growing. Both the Virginia and Sora Rails arrive here at the same time—about the middle of April and nest side by side in some marsh or swamp.

The Virginia Rail generally begins to nest about a week earlier than the Sora. The Virginia Rail commences to nest about the first of May—as soon as the grass in the swamps gets tall enough for them to hide their nests in it, and nests until the middle of June.

The Virginia Rail generally chooses a thick bunch of long marsh grass as a nesting place, but I have found many in small bushes, and a few at the base of small saplings.

When the nest is placed in a bunch of grass, the birds will build it up about six or eight inches from the water, and then carefully draw together the tops of the grass overhanging the nest and make a sort of bower, which conceals the nest and makes it exceedingly hard to discover.

On the 21st of May, 1894, I visited a favorite breeding place of this Rail, which was a very wet and swampy place, the water being from six inches to two feet deep, much of it being covered with moss and small aquatic plants. It was full of mire-holes, and I would often get in up to the waist.

Long marsh grass, cat-tails, reeds, sedges and thick clumps of bushes, covered the water in most places.

I staid with the Rails about an hour and a half, and when I started for home I had three quarts of solid Rails eggs.

of both the Virginia and Sora. I could have collected many more, but I did not take any sets that were not complete, or any that were badly incubated.

Most of the Virginia Rail's nests were placed in large bunches of grass, but some were placed in low bushes and one or two were situated on stumps. They were nearly all well hidden, being covered over with long grass. They were composed of fine grass and reeds, some green and some dry, the nest being hollowed just enough to keep the eggs from rolling out.

I have often visited the Rails since and have taken many sets of their eggs, and examined hundreds that I did not take. I think I have seen within the last three years at least two thousand eggs of the Virginia and Sora Rails. They were, however, not nearly as common last year as they were the year before, and I find they change their nesting places when disturbed. The Virginia Rail is more common than the Sora in this locality.

The eggs of the Virginia Rail in each set varies from seven to thirteen, but the number commonly laid is ten or eleven. They vary greatly in size, color, shape, and markings. My brother and I now have two hundred eggs of the Virginia Rail in our collection, out of which twenty-five selected specimens measure 1.24 in. long by .93 in. broad.

Some are nearly round, while others are long and pointed. I have some eggs of the Virginia Rail on which the ground color is nearly pure white, having but very few spots on them, the spots being very small, and hardly any two alike in color, being dark brown, light brown, lilac, purple and many other colors. I have other sets on which the ground color is a very dark cream, almost brown, and covered with

heavy blotches of dark brown, lilac, purple, etc.

The Virginia Rail is not a shy bird, and I have often caught them on their nests. I have sometimes found nests on which the birds were sitting, and the old bird refused to leave the nest, and I was obliged to remove her. She would fly a few rods from me, drop down into the grass, and turn and run up within a few feet from me, and then disappear again in the grass, uttering sharp cries as she ran. She would keep repeating these strange actions until I would leave the nest.

The Sora Rail breeds side by side with the Virginia, choosing the same low wet marshes or bog holes.

The Sora builds its nest in very much the same manner as does the Virginia Rail. The Sora is unlike the Virginia in actions, the latter being tame and the former shy.

The Sora lays from seven to seventeen eggs, and I have one set in my collection that contains twenty-two. I found and collected this set myself, and know that no person placed any extra eggs in the nest.

Some people believe two birds occupy the same nest when large sets are found but I think this is not true. I also think the whole set was laid by the same bird.

It has always been a wonder to me how such a small bird as the Sora could lay sixteen or seventeen eggs in one set. I have found many sets containing sixteen, and a few containing seventeen eggs. By examining thirty-five or forty complete sets, I have found the number commonly laid is thirteen.

The Sora is very shy around its nesting place. If anyone approaches its nest the bird will quietly vacate it and slip off into the grass.

Although I have found hundreds of nests of this bird which contained eggs, I have seen but very few birds sitting on their nests. The eggs of the Sora,

like those of the Virginia Rail, vary greatly in size, shape, and markings. Out of two hundred eggs of this Rail in our collection, twenty-five selected specimens average in measurement 1.23 by .87 inches.

I have three eggs of the Sora that are almost spotless, having one or two large blotches about one-third of an inch square on their surface, and also a few small dots besides. They were all in the same set, which contained twelve eggs, but all but these three were destroyed by snakes or some other foe, as the shells were in the nest.

The ground color of the eggs of the Sora varies from a very dark cream to a light brown, the markings being of a dark brown, purple, lavender or reddish dish color.

Nearly all the Soras and also some Virginia Rails, begin setting as soon as they lay the first egg, and continue to lay and incubate their eggs at the same time. As the Sora lays a large number of eggs it is almost impossible to find a large set that does not contain some badly incubated eggs, although the set of twenty-two I found contained only four or five eggs in which incubation was far advanced.

The young of the Virginia and Sora Rails leave the nest as soon as hatched. These little Rails are very pretty, being covered with jet black down, and they are also very lively. They are good swimmers and it is a very hard matter to catch them, as they will hide in the grass, or swim off in the water. I have captured many of these little Rails, and taken them to my home. They will eat worms, flies, or any insect they can swallow, and seem perfectly contented during captivity. I have never kept them long, however, not more than two days, when I would take them back and leave them near the nest where the old birds could find them.

The heavy rains during the spring of 1894 flooded the swamps, and I found

hundreds of incubated Rails eggs floating on the water, as it rose so rapidly the Rails could not get time to raise their nests.

As soon as the water begins to rise in the swamps the Rails will commence to raise their nests. They tear the grass loose with their beak, that holds the nest down and as the water raises it, they will build under it, thereby keeping it from floating off, and forming a solid foundation.

Just when the 1894 flood was at its highest I procured a boat and rowed out into the deepest water in a large marsh of several thousand acres, which was all submerged but the tops of the grass, and in many places this was covered with water also.

I found a nest of the Virginia Rail on the top of the water which was three and one-half feet deep. Upon examination, I found the Rails were obliged to raise their nest three feet to escape the water. They must have worked very hard to save their nest, for the water raised very rapidly. I also found dozens of other nests raised, but none so high as this one.

The Virginia and Sora Rails feed on worms, bugs, flies and all insects they can find. I think they also eat the tender roots and grasses. They do most of their feeding early in the morning, or after sun down at night. At these times one may hear their strange cries, as they wander through the grass.

In the later part of April, while out duck and snipe hunting, early in the morning or late in the afternoon, I have seen dozens of Rails, many of them coming within a few feet from me, in search of food.

Although I have never eaten any, both the Virginia and Sora Rails are said to be good eating, and many are shot by hunters every spring. They are very easily shot, for when they fly, they will fly only a few rods and drop into the grass again. They are swift

runners and it is no easy matter to catch one after it is wounded if the wound is not a mortal one.

The Rails have many foes, and many nests are robbed of their eggs by weasels, snakes, blackbirds and Marsh Hawks, although the latter cannot discover them very easily, for the Marsh Hawk searches for its food while flying and a majority of the Rails' nests are covered over, making it hard to distinguish them when the Hawks are above.

Both Virginia and Sora Rails depart early, about the middle of August—just as soon as the young birds get strong enough to fly well.

DANA C. GILLETTE,
Barre Center, N. Y.

The First of June in Alberta.

For some weeks my friend Dr. George and I had been looking forward to a nesting trip to six small lakes about twelve miles southwest of Innisfail, the special object of his trip being to secure eggs of the Canada Goose, that of mine being those of the Sandhill [?—Ed.] Crane, not of course limiting our take to these; but the Doctor's professional duties and a rush of work on the ranch had kept us both at home, but at length we were off, leaving "Linden Lodge," Doctor's place, at 4:45 a. m., Monday, June 1, 1896.

The weather was superb and after about nine miles of a drive over hill, valley, prairie and slough, we picked up our guide for the day at a small shack about three miles from the lakes, said guide being a thirteen year old boy who proved to have an astonishing knowledge of the location of our destination; for after the Doctor had secured a set of Bluebirds eggs not far from the aforesaid shack, the boy guided us, through a very labyrinth of sloughs, bluffs, hills and muskegs, to a lake where he assured us a "Goose nest had been robbed on an island last year."

After picketing out the team and taking a very cursory glance at the fine scenery to be viewed from this point we started to wade; before long a female Mallard flew from a bunch of rushes and Doctor being nearest secured the three eggs which were in her nest. Soon a Coot emerged from the rushes and again Doctor secured securing one egg, in a few minutes I had come across a nest of the Red-winged Blackbird and from this time on their bright cheery note was to be heard throughout the day and we each secured a fine set before evening.

When we arrived opposite the island where we expected to find the Goose nest Doctor waded towards it and was soon up to his armpits; on arrival no Goose eggs were to be found but a Loon's nest and one egg, which having secured the return through the deep was made. After wading a short distance further, Doctor found nest and three eggs of the Pied-billed Grebe; then having secured only my set of Red-winged Blackbird's my mercury went down to zero and I began to think that perhaps after all bird nesting was a wicked pursuit.

After completing the circuit of this first lake, we wended our way to the next, somewhat larger, but with fewer rushes and having skirted along its shore for a few hundred yards, we saw through an opening in the hills a chain of sloughs and small lakes; we left the large sheet for later exploration and went the rounds of the new lot; we found no eggs, but saw a pair each of Wilson's Phalarope and Mallard and several pairs of Killdeer, but were too early for the first and last and the Mallards flew off in the direction of the large lake we had just left.

Our guide now proposed a trip to a long narrow lake further west where (he said) there were lots of ducks and geese nesting, but after a long and wearisome walk over hills and through sloughs and nearly getting into a mus-

keg, he was compelled to own up to being at fault and so we set out, tired, hot and hungry for the second lake we had visited, arrived there we dispatched the boy for the lunch basket and sat down to rest and blow our take, chiefly the former in my case.

Soon the lunch arrived and after discussing it we set out to finish the large lake, soon I spied a pair of Loons on the water and on going forward a short distance I saw a conical heap of rushes bearing a depression at the top, a little nearer and I could see the eggs and with a shout I plunged through the intervening water with much splashing and soon had the two beauties in hand.

You who have had similar experiences can sympathize with me and realize the thrill of delight that shot through me as I gazed on my prize, perhaps not to be considered so by a veteran, but to the beginner, well you know how it is yourself! We secured nothing further at this lake but saw a pair of Canada Geese on the far side.

On the way to the remainder of the lakes, which are much smaller and all in one valley, we passed through an old beaver meadow, which required five dams of a total length of about 200 yards, to make the necessary pond, which however was now deserted and dry. But I digress—we soon reached a fine reedy lake and the Doctor started for a large clump of reeds near the center of it while I kept well inshore, after wading nearly half way around I saw a large nest built amongst the rushes; it was about three and a half feet in diameter at the bottom, nearly a foot high and a good two feet across the top and to my unaccustomed eye an old one and empty, however as I drew near to take a closer look at its structure, intending to ask Doctor as to its identity, I caught sight of a white gleam and soon had the old rushes off, disclosing four eggs of the Canada Goose which I was enabled to identify by the arrival of the owners,

who however made but a short stay and were soon out of sight. Soon I found a nest and three eggs of Pied-billed Grebe very similar in construction to that of the Canada Goose, just described, but of course much smaller; and the eggs were completely hidden by rushes strewn over them.

Doctor had in the meantime taken a set of eleven Mallard's eggs, having flushed the bird. As we started for the next water I found a Coot's nest, built among the rushes being basket shaped woven of rushes and anchored to the standing ones; there were five eggs in it and one at the side, buoyed up by some rushes, but the wavelets made by my wading sent it to the bottom before I could reach it.

While we were thus engaged our guide, walking midway between the water and a bluff on higher ground than the shore had flushed a Spotted Sandpiper off her nest and four eggs, by actually stepping into it; two were broken and the other two fell to me. It was at the last lake that we saw Blue and Green-winged Teal and Shovellers but were too early for eggs.

Having finished the lakes with no further finds, we returned to the rig, each taking on the way a set of Bronzed Grackle eggs, arriving we blew the balance of our take and started for home. On the way we called at a small lake about three miles from Innisfail where Doctor showed me the nest where he had taken two eggs of Sandhill [?—ED.] Crane the previous week; I was much interested in the large flat structure built of rushes and grass and anchored to standing rushes of last year; it was nearly five feet in diameter and had a slightly noticeable depression in the centre, which was smoother in construction than the balance of the nest.

Finding nothing further here, we soon began the last stage of our homeward way and (as they say of excurs-

sionists) arrived tired but well satisfied with our days outing.

Wm. GEARY,
Innisfail, Alberta.

Pine Grosbeak.

Pinicola enucleator.

This large and handsome Grosbeak is an irregular winter visitor in New Hampshire. One year scarcely one of these birds are seen here. Perhaps the very next they come down from the north in large numbers. When they do come down from the snow bound regions of the north we first see them the last days of November. They remain with us until the last of March.

At this time they disappear going farther north to their breeding places.

One day last winter I saw a flock of about twenty of the Grosbeaks getting their food, which consisted of weed seeds, apple seeds and bits of frozen apples. The birds greatly enlivened the winter landscape, I watched them for a long time highly entertained by their graceful actions. They did not show the least fear because of my presence although I was at times within two rods of some of them. It has always been a mystery to me how Grosbeaks and many other kinds of winter birds can live through our cold and stormy New Hampshire winters. They seem, however, in some way or other to find something to eat and a shelter in the time of storm. I have never heard the Grosbeaks sing much during the winter months. Sometimes a few clear liquid notes are heard from them which seem like music after hearing the harsh discordant notes of the Blue Jay.

I have never heard of any one finding the nest of the Pine Grosbeak in New Hampshire. Should like to hear from any one acquainted with the breeding habits of this bird.

FRANK SANDERS,
Laconia. N. H.,

THE OÖLOGIST.

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A Valued Suggestion.

EDITOR OÖLOGIST:—

At a recent meeting of the Wheaton Ornithological Club of the Ohio State University, the question of pronunciation of scientific names was raised and it developed that nearly every member had his own way of pronouncing. It was then resolved, as a means of bringing *order* out of *chaos*, to request you to take the initiative in the new 1897 Catalogue or Handbook. This little publi-

cation of yours, beyond doubt, reaches more ornithologists than any other in the country (there are over 20 Handbooks in our club) and therefore would be a very powerful agent in disseminating seeds of pronunciation (to use a botanical figure). What we would propose is this: That the syllables be separated by hyphen and the accented syllables indicated, and any other diacritical marks added which would facilitate pronunciation, e. g.: Pod-i-lym'-bus pod'-i-ceps, or Den-dro'-i-ca aes'-ti-va. We do not advocate any certain system but believe that *some* system is necessary. Accordingly, we urge you to give the matter your careful consideration, and we feel satisfied that by so doing you will greatly oblige your many patrons everywhere, as well as those who are members of the Wheaton Club.

Very Respectfully,

RAYMOND C. OSBURN, Pres.,
Columbus, O.

[Until some enterprising or perhaps philanthropic publisher gives us something inexpensive along the line of the above timely suggestion the Club and others may find it advisable to invest \$3 in a copy of Dr. Eliot Coues' "Checklist of American Birds" which contains a Dictionary of the Etymology, Orthography and Orthœphy of the names of Birds—ED.]

Notes on a Few Winter Residents of Edgecombe Co., N. C.

766, BLUEBIRD, *Sialia sialis*. I note quite a decrease in the numbers of this species during the past few years, owing possibly to the cold winter of 1894, during which many froze to death. Several farmers of this locality gave information to the effect that as many as 20 dead birds were discovered in a single stack of fodder after this extraordinary cold period.

The chief roosting-places of this species are excavations, both natural and

artificial, stacks of hay and fodder and boxes put up for Martins and these birds to build in. Principal food, the persimmon fruit, sumac seeds, various insects and worms.

Being one of our earliest breeders they usually pair about Feb. 20. They become quite abundant as spring approaches and generally appear in close vicinity of their nesting site.

761, AMERICAN ROBIN, *Merula migratoria*. Quite rare in early winter becoming very abundant about April 1st. It is calculated by some that the *M. migratoria* nests in this locality, but during all my collecting career I have never seen this fact proven. I have neither collected a single egg nor observed but one specimen during the summer months.

Upon their first arrival, about Sept. 15th, they appear to be rather frightful inhabiting swamps only but later on there being an increase they show less fear and may be seen in open woods, in branches in trees and on the ground searching for their food which consists mainly of angle worms, insects, holly and gum berries, in fact nearly all kinds of berries.

During early spring they become quite tame and resort to the open fields in large numbers, sometimes thousands, in quest of the worms that are turned up by the plow. This is the period of the small boy's delight, as the opportunity of killing and trapping so many birds scarcely ever presents itself. I have known some small boys to set fish hooks in the fields with angle worms as bait, thereby catching quite a number. The Robins leave for other sources about April 10th. Just before taking departure they make the woods thrill with their melodious songs, which can be heard for some distance.

755, WOOD THRUSH, *Turdus mustelinus*. Commonly called "Swamp Robin" and by some "Pewter Legs" is both a summer and winter resident. Rather

common and generally preferring low land but may be seen quite often in upland woods. Its mode of living is by scratching, procuring nearly all its food in that way, which consists of various worms and insects. Roosts in heaps of brush for the most part.

735, CHICKADEE, *Parus atricapillus*. This little acquaintance is also both a winter and summer resident, being rather common. It is often seen in company with the Tufted Titmouse and is one of our earliest breeders, nesting about April 1st. Its cry is nearly similar to that often made by the *P. bicolor*.

The lowlands are its general preference where it seeks and obtains its food consisting of worms, insects and their eggs. It obtains the greater part of its food from the bark of trees and from decayed wood.

Roosts in decayed stumps and trees and in natural excavations.

731, TUFTED TITMOUSE, *Parus bicolor*. General preference of locality is the river lowlands where they appear abundant at some periods. Their food is almost similar to that of the preceding species and it is nearly always seen in company with that species. Appears rather pugnacious at times. Is both a summer and winter resident.

729, BROWN-HEADED NUTHATCH, *Sitta pusilla*. This familiar little species is observed quite often in open woods which are its general preference. They appear abundant in some portions of the country while in others they are quite rare. Usually seen in flocks of four or five and remains with us all the year round.

I note that it procures nearly all of its food from the pine consisting of worms and insects that are concealed within the bark. It is our smallest winter species and is quite an early breeder.

W. LINDSAY FOXHALL,
Tarboro, N. C.

**The Red-tailed Hawk in Hardin County
Iowa.**

Although this bird has been frequently spoken of in the OÖLOGIST and other papers it has not had much representation in Iowa or at least in this locality. This Hawk is quite plentiful in this vicinity from the fact that we have so many gophers or prairie squirrels, which is one of their chief articles of food. I have taken seven sets of their eggs in the seasons of '94 and '95 besides those taken by other collectors. The nesting season begins about April 10th and lasts until May 20. The best time to find full sets is from April 20th to May 1st. I have no way of measuring the eggs taken but think that they will average larger than those given by Davie, although W. A. Davidson of Detroit, Mich., tells me that the ones I sent him are smaller than those collected in his locality. There are generally two eggs in a nest but not uncommonly I find three. Davie says they sometimes lay four but I have never had the luck to find a set of four.

Below I give extracts from the datas for the sets collected in '94 and '95:

April 20, 1894. Eggs, three; incubation just commenced. Nest in burr-oak tree about 60 ft. up. Made of coarse sticks and lined with bark and moss. Very large but shallow.

May 10, 1894. Eggs, two; incubation advanced. Nest in oak tree about 40 ft. up. Made of coarse sticks and lined with bark, moss and a few feathers.

April 16, 1895. Eggs, two; incubation fresh. Nest in large tree about 30 ft. up and out on a horizontal limb about 12 ft. from body of the tree. Made of coarse sticks and lined with bark and moss. Very shallow, nearly flat.

April 21, 1895. Eggs, two; incubation begun. Nest in white oak tree about 40 ft. up. Made of coarse sticks and two pieces of cornstalk and lined with bark, corn husks and buds.

I went to this nest again on May 6th and found one egg in the nest. I left it thinking I would get another set. On the 10th I returned and saw the female leave the nest. I climbed the tree but found only one egg. I don't know whether the Hawk laid only one egg or whether one had been destroyed. The egg was slightly incubated.

April 25, 1895. Eggs, two; incubation fresh. Nest in basswood tree 50 ft. up. Made of coarse sticks and lined with bark, corn husks, catkins and moss. A very large nest.

May 11, 1895. Eggs, two; incubation slight. Nest in red oak tree about 35 ft. up. Made of coarse sticks and lined with bark and moss. A very thick nest but very shallow inside.

Davie speaks of the Red-tail nesting in old Crows' nests rebuilt but I have never found them to do so in this locality. They will continue to lay in the same nest several years in succession even after being robbed but I think it is the same pair that use the nest again. Sometimes after being robbed they will the next season build a new nest within a few rods of the old one instead of looking up a new locality.

CLARENCE HARTINGER,
Alden, Iowa.

Early Collecting.

I went to the woods yesterday and got two sets of two Great Horned Owl's eggs saw five Meadowlarks, two Doves, one Mockingbird, three Robins, two Bluebirds, five Towhees and a host of Woodpeckers of the Downy, Hairy, Red-head, Flicker and Yellow-bellied species, Nuthatches, Chickadees, Creepier Kinglets, Sparrows, Red-shouldered Hawk, Snowbirds, and the strange part of the programme is, the mercury registered zero. I used to think Meadowlarks, Doves, Robins, Bluebirds and the like could not stand very much cold weather but I see they do.

If nothing prevents I shall endeavor to send you some notes for publication this year. C. B. VANDERCOOK,
Jan. 26, 1897. Odin, Ills.

Hotels and Summer Boarding Houses.

The West Shore Railroad list of Hotels and Summer Boarding Houses for the season of 1897 is in course of preparation. This list will embrace all the hotels and summer boarding houses on the lines of the West Shore, Wallkill Valley, Ulster & Delaware, Stony Clove & Catskill Mountain, Kaaterskill, Catskill Mountain & Cairo and Delaware & Hudson Railroads.

In order that the list may be made as complete as possible, and that correct information may be given to those seeking summer homes; hotels, summer boarding and farm houses desiring summer boarders are requested to address C. E. Lambert, General Passenger Agt., West Shore Railroad, 5 Vanderbilt Avenue, New York, for blank form on which to give the desired information. No charge is made for representation in this list.

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Many Subscriptions to

THE OOLOGIST

have expired, or will expire with this issue. In the future the Publisher requires CASH IN ADVANCE. Hence, if you are one of the delinquent subscribers, your subscription should be forwarded by return mail, if you wish the OÖLOGIST continued to your address.

March issue will go to press promptly on March 1, and be mailed during the first week of that month—all Exchange, advertisements and notes for that issue, must be forwarded by return to insure insertion in that issue.

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THE OÖLOGIST.

Monthly.

VOL. XIV. NO. 3.

ALBION, N. Y., MARCH, 1897.

WHOLE NO. 130.

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April issue will go to press promptly on March 25, and be mailed during the following week—all Exchange, advertisements and notes for that issue, must be forwarded by return mail to insure insertion in that issue.

THE OÖLOGIST.

VOL. XIV. NO. 3.

ALBION, N. Y., MARCH, 1897.

WHOLE NO. 130

The Nest Building of the Swallows.

Last summer I was very much interested in the different opinions expressed in your valuable journal by correspondents on the above subject, but want of time prevented me to enter also into this discussion, as I intended to make a long chapter of it, while with unusual facilities my observations extend to both sides of our hemisphere. In Germany, the Swallows are by all people regarded with affection as harbingers of luck and good cheer. Nobody harms them and consequently they are very tame and abound in great numbers. I have been especially fond of them from my earliest recollections, and when I watched their way of sitting in long rows, often in company with the bold and impudent Sparrows, on the beams which connected the high Gothic pillars at our church—an old one built in the twelfth century, and in which very many windows were broken, through which they entered; to the childish fancies the little white-breasted birds preached better sermons than the minister, or even Luther, whose life-size picture hung on the pillar underneath them, could have done. But the Sparrows were noisy and quarrelsome, and, to my regret, the municipality concluded to have a restoration of the church with new windows all around. My father had the contract for this work, and so I learned and became intimately acquainted with many interesting facts concerning these Swallow nests, some of which had no doubt been built centuries before, the number gradually increasing to thousands all around the windows, in the recesses formed by the thick brick walls. The workmen had to use stone-cutters' tools to chip them off, so hard had they

become; and by their construction no doubt a certain glue-like substance had been used with the chalky mortar. Their shape was variable, some half round and partly open, and some—the most of them—had only a round hole for their entrance. These were the nests of the Swifts, and *Cypselus apus*, and *C. pelasgia*, and also of *Hirundo urbica*, and *H. rustica*; then the varied sizes and colors of the eggs which had to be sacrificed, testified to their different kinds. Some of them were very long and thin, some more oval, and some brownish speckled; while the others were white or nearly so. That the workmen in destroying the nests while the birds were breeding had a hard time of it, was natural. The distress of the birds was pitiful in the extreme. The house Swallows often built their nests over the porch of the house door, about the entrance, and the rearing of their young is watched by all alike with pleasure.

Here on our own place I have seen them build under the roof of the barn, entering by a window, and under the shed close by. It took a pair a whole week after their arrival to decide about the best situation, and all their relations had to come and give their opinions, too, about it. When finally concluded, they kept for hours wetting the space on which the nest was to be fastened. This they did with their own saliva, while clinging to the wall, without leaving the shed. Later they brought material of mud from the bank of the brook, and cow-dung fresh from the pasture. In two days the home was done with the exception of the inner lining which was not very elaborate. Dried grasses I have seen them pull up with their other material, but never saw nor heard the breaking of dried twigs. To the con-

trary they avoided carefully a flight between trees, as if a stunning blow might be fatal or hurtful. While they often fly low, especially if a cat is around, which they try to chase off, they never fly where bushes obstruct their airy progress. I would be pleased if others of your readers had made like observations.—*Mrs. Wilhelmine Seliger, Hartford, Conn., in Meehan's Monthly for March.*

For Closer Union.

If I knew what to say and how to say it, I might set the whole world to thinking, but as this is beyond my power I will try to secure the attention of a few, in hopes of causing them to think with me.

It seems to me that the one thing the Ornithologist lacks is union with his fellow workers. He has a plentiful lack of societies. Prior to my beginning the work of an ornithologist, I had been a stamp collector, in which pursuit I had become accustomed to societies galore; societies international, national, state and local. Upon my taking up my new work I was surprised at the scarcity of them. I felt the need of them immediately and have felt it ever since. I feel that if I had a membership in a society similar to the one in Michigan my progress in ornithological lines would be greatly facilitated. As it is I have nothing but my own experience and what I can glean from books and magazines to aid me. Most of that taken from the magazines is written by collectors from other states and considerable of it pertains to birds not found in this state, and many of the birds whose habits I desire to know about are not mentioned. When they are, I usually have to allow a little leeway on the time of arrivals, nesting, etc., on account of the writer living in a different latitude from myself. If there were

a state society in Illinois, the other members could receive the full benefit of my notes, and I, of theirs; and by comparing and noting likenesses and differences I could obtain a fair if not a first-class account of the bird whose habits I want.

If I had my choice of societies or the power to make one to my liking I would have notes gathered by taking one bird at a time, and making a complete canvass of all the state by means of the members residing in the several parts, similar to the plan adopted by the Michigan society; and I would publish the notes thus obtained in a book or pamphlet form, giving authority for each note. I would have a department of identification, supported at the expense of the society (if there should be any occasion for such expense), the only requisite on the part of the person sending, to be to send stamps for their return. The person for this should have a fair knowledge of the avi-fauna of the state and if necessary should receive a certain price per specimen from the society. I would have an Auction department, to which persons having specimens for sale might send them for disposal. They should be sold to the highest bidder, and the bidding should be conducted by mail, and no bids opened until the day upon which the sale is to come off. The society should receive 10 per cent of the selling price as commission of which one-half should go to the auction agent in payment for his services, the remaining half to be placed in the treasury. As a protection against fraudulent practices, I would make a provision for the expulsion of any member who should be found guilty of willfully practicing deception upon any person whether members or not.

I would have an annual convention held at some resort or picturesque spot where the members and officers could renew acquaintances, compare notes,

transact business matters pertaining to the society and have a good time in general. It should last from three to six days and at least one of these should be taken up by papers, talks, readings and discussions of matters pertaining to the work and to the management of the society. This would result in a revival of friendships and a stirring up of those who are inclined to "collect" instead of doing the actual work.

Last month I wrote to some of the influential men of ornithology in the state of Illinois asking their assistance in my attempt to organize a society on these principles in the state of Illinois. At the time of this writing I have not heard from all but feel that none will decline to help unless business or other circumstances interfere.

I believe that if there were more societies in existence there more persons would become interested in the work and as the amateur of today will sometime have to fill the place of the present advanced scientist it will be well to encourage them in the work and the access they have to the benefits of a good society, the more competent will they be and the more worthy of filling your places in the future.

CLYDE L. SMITH,
Oblong, Ills.

From Venezuela.

EDITOR OÖLOGIST:

Perhaps a few more general notes on the birds of South America, that is, some of the birds of the Orinoco Delta, will prove of interest to your readers.

Santa Catilena is about thirty miles up the river from Sacupana, from which latter point I last wrote the OÖLOGIST, and is opposite the island of Tortola, the largest island in the Orinoco Grande. Tortola means Turtle Dove. Our first camp was on Paloma Island and Paloma in Spanish signifies

Dove. This would convey the impression that Doves must be very common here else there would not be two Dove islands and it is a fact that Doves are very common along the lower Orinoco. The voices of these mournful singers can be heard at all hours of the day, especially in the early morning and late afternoon. While they commonly frequent the woods along the water courses, yet I have heard them call from out the deep forest, where a ray of sunlight rarely reaches the earth so heavy with foliage are the tops of the tall trees.

In the same deep solitude, but far back from the river, dwells the bell-voiced Campinero or Bell-bird, as writers on British Guiana have called it. The lone traveler in the Imatocas is often bewildered on hearing the clear notes of a bell ring out seemingly near at hand. His search for the source of the music is seldom rewarded by a sight of the bird for this sweet-voiced dweller of the wilderness seems to prefer to remain hidden from the sight of man.

In these great dark forests all animal life is above in the tree tops. I say all, but now and then a bat flits by or a huge moth is disturbed as one walks in the perpetual dusk, as of evening, of these dense woods. Up above can be heard the whistle of the Trogan or the shrill cry of the Flycatcher, the bark of monkeys and a branch may sway out with the weight of some huge snake trailing its sinuous course through the tree tops. But these do not come down to the ground only in places where the sunlight penetrates to the earth.

The Swallow-tailed Kite, an acquaintance of the North is common here. They can be seen high overhead performing their graceful aerial gyrations as many as ten or twelve together. Here, too, the Groove-billed Ani and Savanna Blackbird is found, and

among the mimosa thickets of the savannas their plaintive cry is a familiar sound. One of these birds shot by me had swallowed a fourteen-inch chameleon. Six inches of the reptile's tail protruded beyond the bird's bill and I thought it was a snake until I dissected the bird. I discovered that only the head of the chameleon was digested. The Ani must have been going around for several hours at least unable to close its bill.

Along the river the Anhinga, another bird well known in our Southern States is found in considerable numbers. Poised on some bush or snag they can be seen waiting for their finny prey. On the approach of a boat they will dive into the water and will show their snake-like neck and head above the surface. They are not nearly so wild here though as I found them along the Atchafalya and lower Mississippi river. The same could be said of the other birds mentioned that are common to both the States and this region.

Now and then flocks of the Scarlet Ibis can be seen winging their way in even lines up and down the Orinoco. I have shot a few specimens of the Gt. Blue Heron, also of the Snowy Heron. Both of these birds present a graceful and stately appearance as they stand by the water side, silently watching for frog, fish, snake or worm, anything that will satisfy their hunger. The White Egret too is here, and many a bird has been sacrificed to satisfy the greed of the plume hunter. The plumes of the Little White Egret are said to bring two hundred dollars per pound in Cindad, Bolivia.

On the savannas and along the canos or small streams, where a mass of vegetation thinly covers the water the Jacana is found apparently always hungry, searching for insects. In these same streams and flooded savannas or marshes as we would call them in the north, the voracious caribe fish swarms

and alligators are also abundant. And here is enacted the battle for existence, the survival of the fittest—the Pana after the insects and the caribe and alligator after the Pana. The caribe must look out for the "gater" too, but the Jacana has as much to fear from one as the other.

One Jacana that I shot some weeks ago had a foot and about half of the tarsus amputated, presumably by a caribe. The wound had healed so it must have had the service of but one foot for some time. If your readers could have seen what I witnessed, the thumb of a man nearly severed from his hand by the attack of one of these fish, they would not doubt the caribe's ability to amputate the leg of a bird. More than this, I have had personal experience with this little fresh water shark, to the extent that quite a large piece of flesh was torn from my thigh by their attack when I was swimming ashore from an overturned boat in the Orinoco.

Once when I had killed seven Jacanas—they run all over the water—the alligators got four of the birds before I could reach them with my boat. One of the saurians I had the pleasure of shooting and another I struck over the snout with my paddle as he came up near one of the dead birds.

The Jacana is an attractive bird, of rich chestnut plumage with purplish tinge, secondaries and primaries yellowish-green—a horny space on each wing yellow in color. Their long toes permit them to speed over the floating vegetation of the rivers and savannas with ease.

There is much that I might say further of the birds of the Orinoco Delta but as I expect to be here some months longer I will try and send other communications from time to time.

Very truly yours,
LESLIE O. DART,
Santa Catilena, Venezuela.

THE OÖLOGIST.

A Monthly Magazine Devoted to

OÖLOGY AND ORNITHOLOGY.

FRANK H. LATTIN, Editor and Publisher,
ALBION, N. Y.

Correspondence and Items of interest to the student of Birds, their Nests and Eggs, solicited from all.

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FRANK H. LATTIN,
Albion, Orleans Co., N. Y.

PAID AT THE POST OFFICE AT ALBION, N. Y., AS SECOND-CLASS MATTER.

The Sandhill Crane.

Grus mexicana (MULL).

This species is but little known to the large majority of bird observers in the United States and next to not at all by 999 persons out of every 1,000—take them right through from ocean to ocean. The Sandhill Crane is so well known in some sections, more especially west of the Mississippi river, and in the Southern States, that some readers may object to my assertion regarding

the lack of abundance—but I think I'm right in my opinion. There are probably a million people in America who from poor judgment or no reasoning at all, call the Great Blue Heron the Sandhill, and others who apply the name to most any long-legged bird. But these observers (?) belong to that class who call the Flicker a woodcock, a Skunk a polecat and a Porcupine a hedgehog:—their opinion amounts to nothing.

Once these birds were common where they are not known at the present day. For instance, the Sandhill was well known in my county (Kalamazoo) forty to fifty years ago, yet in nearly thirty years of observance I have not seen a single specimen. Like the Raven it has ceased to visit our county.

What is the reason for this? It is not because we are too advanced in civilization, for if that is the reason, why should the birds still visit Shiawassee, VanBuren, Berrien and Ingham counties and within a few miles of the state Capital, Lansing, where a nest was found but a few years since. To be sure, civilization affects all of our birds, and mostly to increase their numbers, particularly with the Swallow species, I sincerely believe, but in the case of the Sandhill Crane, as with many other species, we must find some other reason than the generally accepted one regarding the influences of civilization, to account for the selected lines of migration and for choice of breeding locations. All the way from Northern Michigan, through Indiana, Ohio, Kentucky, Tennessee, Georgia and way south in Florida, I have made observations, or received reports from reliable sources, and have arrived at the conclusion that the Sandhills have exact routes of migration and are very tenacious of their rights to old nesting haunts; often passing near too, or directly over populous cities on their way to northern breeding grounds.

There are many sections in the Great

Lake Region where the birds are unknown, and have not been seen in the history of those parts, although the localities offer the best of inducements in the lay of the land and water. Again we find them reported as common in other sections not far removed. In truth we may find this species a regular visitant to one county, and yet absolutely never seen in the adjoining counties on the east and west. This same condition obtains to the South, where from Southern Florida northward the birds are known or unknown as the case may be and often are within very narrow bounds. From the Indians, mainly half-breeds, but reliable, as to natural history topics, who live in the Lake Superior Region, I learned that these Cranes summered to the north of the Great Lakes, and I have found them nesting nearly as far south as the 27th parallel in the Eastern part of Florida. Thus we find that the Sandhill nests in the South or migrates north to breed, covering all of twenty-five degrees of latitude and much more than this according to some authorities.*

In Indiana, Illinois and Michigan these Cranes nest in late May, while the eggs are deposited in Southern Florida in late February or March. The nest is a rudely constructed affair of coarse grass and weeds; is spread out and quite flat. Sometimes there is no nest, the eggs being laid upon the grassy covering of the marsh in a simple hollow.

The eggs, two in number, are huge, and I think surpassed in size in North America by Swan's eggs alone. They are of a light drab or grayish-buff, and are more or less covered with spots and blotches of brown. They are striking

in appearance and make beautiful additions to a collector's cabinet.

On one of my trips to Florida I touched at a bnmmy little town on Indian River, named Fort Pierce. Noticing a cowboy with a couple of Crane's eggs I followed him into a saloon and saw him dispose of them for two drinks, the value of a quarter. Engaging the bartender in conversation I purchased the eggs at a small advance, and followed after the bull sticker, as the herders are called. The raising of cattle in Florida is quite an industry, though it is not generally known at the north. The cattle range wildly over the grazing portions of the everglades from near Lake Okechobee, to the north and east. This cow puncher was an intelligent fellow, and supplied me with much information. He said that he often found eggs in the marshes and generally near the water; that two eggs were in nearly all the nests, but occasionally three.

In my travels about the state, on that trip, and later, I found the Sandhill Crane quite generally distributed on both the Atlantic and Gulf coasts, as well as in the marshy interior. The nests were never more than flattened out piles of grass and the eggs were always easily found when a nesting locality was discovered, for the big, ungainly birds could never hide themselves.

It is a common practice for the birds to fly about at a great height, apparently in sport. This occurs generally in the morning or evening, but the act is sometimes observed at mid-day. So high do the birds sometimes fly that they look like mere specks in the sky, yet their penetrating notes can be plainly heard at over a mile's distance. The notes which are something like the sound produced upon a cracked bell are not agreeable when near by, but at a diatant sound well and once heard will never be forgotten. make pleasing pets. The young birds are excellent for the table, the old birds are

* There are several species of birds in Florida which are found nesting there as well as at the north, having a breeding range of latitude of over twenty degrees. Among them is the Great Blue Heron, which I have traced in nesting range from Southern Florida to Lake Superior.

also eaten but I found the meat rather stringy, much like boiled beef, but coarser.

This species is given to assembling in the mating season and going through peculiar antics, rather like the movements of the prairie hen, if I can make the comparison. These motions are called dancing and the meets are known as Crane balls. Once when on a tramp in Illinois, nearly a quarter of a century ago, I witnessed a ludicrous scene of this nature, and the performance was the most entertaining that I have ever seen among our birds.

Kalamazoo, Mich.

Red-shouldered Hawk in Western New York.

In my list of the Birds of Western New York (page 10 of the 2d edition) occurs the following in regard to this species:

"The most common of our larger Hawks. Breeding in all suitable places." This statement has been criticised and I wish to make a few explanations.

In the constitution of the "Western New York Naturalists' Association" western New York is defined as the 13 western counties, east to, and including Wayne, Ontario and Steuben, and my list was intended to cover that territory.

My own personal observations were all made in Monroe county up to the time of the 2d edition. I knew at that time that in Mr. Davison's "List of Niagara County Birds, etc.,," this bird was not mentioned, also that Mr. Posson in his list of Orleans County Birds says "rare" and mentions only one taken, but I certainly under-estimated the importance of these facts. Mr. Posson has kindly furnished me with additional quotations as follows, from Bergtold's "List of Birds of Buffalo, etc.,," "occasional resident;" from Langille's "Our Birds in Their Haunts,"

"either rare or overlooked." Mr. Langille I believe confined most of his observations to Niagara and the western portion of Orleans county.

If I am right in this the territory is practically the same as given in lists of Messrs. Davison and Posson. Now going eastward I have reported to me as follows:

Town of Clarendon on eastern edge of Orleans county five sets of Red-shouldered and only one of Red-tail; town of Sweden, Monroe county, five sets of Red-shouldered, no mention of Red-tail; from town of Chili, Monroe county, nine sets of Red-shouldered and one set of Red-tailed. This covered eight years' collecting. From Ontario county I have evidence of the occurrence of both species, but nothing to show which was most common.

Last season I spent in the town of Gaines, Orleans Co., and did not see any Red-shouldered Hawks. Now is it not possible that we have here a fine exhibition of local distribution, one of these large Hawks prevailing in the extreme western counties replaced (in some localities almost entirely) by the other, in the eastern portion of our field. Of course, more evidence would be welcome, especially from Chautauqua, Wayne and Livingstone counties.

If this proves to be the case I would amend my list as follows: "*Buteo linatus*. Common in the eastern counties, very rare in the western ones."

Respectfully submitted,
ERNEST H. SHORT.

Red-headed Woodpecker.

June 6, 1895. I went to a piece of woods near this place for a few sets of Red-headed Woodpecker (*Melanerpes erythrocephalus*). As I entered the woods I saw a hole in an old oak stub which looked suspicious, so I hit the stub with my hatchet, when promptly a Red-head looked out and seeing me

left the tree. I went up and soon had the wood cut away so I could see the eggs. There were five of them, one of which was a runt and as they were somewhat incubated I took the runt and left the other four in the nest, thinking Mrs. Red-head would finish incubation.

Then I went through the woods finding four more nests, one containing six fresh eggs, one in the very top of a tall dead hickory with five fresh eggs, one with five newly hatched young and the other with only three badly incubated eggs.

This took me about two hours, after which I was back at the first nest and not seeing the bird I concluded to go up and get the balance of the set. I was very much surprised when I reached the nest for I saw only *two* eggs where I had left *four* only two hours before. After descending I searched carefully all around the tree for the fragments of the missing eggs but none could be found. So I left the woods and just as I had got into the field I heard Mrs. Red-head and looking around I saw her at the nest cavity. She looked in for several seconds, then walked around the tree, flew to a nearby tree then back looking in the nest again and even went to the ground looking for those eggs. I watched her for ten or fifteen minutes and then came home. When I left she was still at the nest. Now had she carried the missing eggs to another tree and come back for the others?

The runt egg measured .82x.61 in., while one of the normal ones measured .96x.75 in.

VERDI BURTCII,
Penn Yan, N. Y.

Well Known Oologist Dead.

Capt. Charles E. Bendire, Curator in Oology in the National Museum, Washington, D. C., whose death has just been announced at Jacksonville, Fla.,

has been a correspondent of C. L. Rawson of this city for over 20 years. Mr. Rawson has presentation copies of his sumptuous work, *Life Histories of North American Birds*, and autograph copies of all his ornithological monographs. He has also, among many others, eggs with Capt. Bendire's original data, sets of American Raven, White Pelican, Sage Cock, Mountain Partridge, Cactus Wren and Bendire's Thrasher, first collected and determined by the captain at Malheur Lake, Oregon, and at Rattlesnake Creek, Arizona.

[The above clipping from a Norwich, Conn., paper, falls into our hands just as the *OÖLOGIST* is going to press and we trust that the information it conveys may be erroneous.

Capt. Bendire's death at this time with his "Life Histories of North American Birds" unfinished, would be one of the heaviest blows dealt the advancement of American ornithology of the century.—Ed.]

Hotels and Summer Boarding Houses.

The West Shore Railroad list of Hotels and Summer Boarding Houses for the season of 1897 is in course of preparation. This list will embrace all the hotels and summer boarding houses on the lines of the West Shore, Wallkill Valley, Ulster & Delaware, Stony Clove & Catskill Mountain, Kaaterskill, Catskill Mountain & Cairo and Delaware & Hudson Railroads.

In order that the list may be made as complete as possible, and that correct information may be given to those seeking summer homes; hotels, summer boarding and farm houses desiring summer boarders are requested to address C. E. Lambert, General Passenger Agt., West Shore Railroad, 5 Vanderbilt Avenue, New York, for blank form on which to give the desired information. No charge is made for representation in this list.

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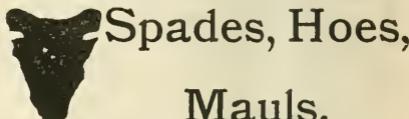
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THE OÖLOGIST.

Monthly.

VOL. XIV. NO. 4.

ALBION, N. Y., APRIL, 1897.

WHOLE NO. 131

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OCTOBER.

Topaz	Fidelity
Turquoise.....	Prosperity

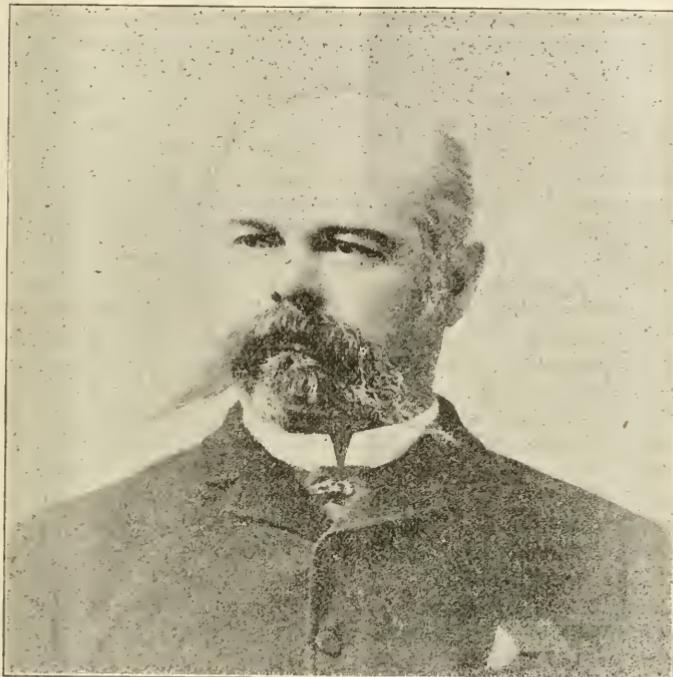
Having a large stock on hand, I will, for a short time, sell 20 lbs. of good Minerals for \$1. One to forty kinds as you want them, large or small.

THE OÖLOGIST.

VOL. XIV. NO. 4.

ALBION, N. Y., APRIL, 1897.

WHOLE NO. 131.



From The Osprey.

The Late Major Charles E. Bendire.

Major Charles E. Bendire, U. S. A., Honorary Curator of the Department of Oology in the U.S. National Museum, died at Jacksonville, Fla., Feb 4, 1897, of Bright's disease. Weary of confinement indoors he went to Florida in hope of finding a milder climate where he might sit outside to enjoy the fresh air and watch the trees and birds—a hope that was not realized, for he died five days after leaving Washington.

Major Bendire was born in Hesse Darmstadt, Germany, April 27, 1836. He was a relative of Weyprecht and Payer, the Austrian Arctic explorers

who discovered and named Franz Josef Land.

He came to this country in 1852, and in June, 1854, enlisted as a private in Company D of the 1st Dragoons, U. S. Army. During the next ten years he was promoted to Sergeant, and served as Hospital Steward in the 4th Cavalry. In 1864 he was transferred to the 1st Cavalry and promoted to 2d, and soon to 1st Lieutenant. In February, 1873, he attained the rank of Captain, and in April, 1886, was retired on account of an injury to the knee. In February, 1890, he was breveted Major for gallant services rendered on Sept 13, 1877, in fighting the Indians at Canon Creek,

Montana—an illustration of the subsequentness of glory in the army!

During his long period of service as an army officer he was stationed at a number of the most remote and inaccessible posts in the West, among which may be mentioned Cantonment Burgwyn, in New Mexico; Forts Bowie, McDowell, Wallen, Lowell and Whipple, in Arizona; Bidwell and Independence (the latter in Owens Valley,) in California; Harney and Klamath, in Oregon; Vancouver and Walla Walla, in Washington; Boise and Lapwai, in Idaho, and Custer, in Montana. And it should be remembered that his service at most of these posts antedated the construction of the transcontinental railroads which now traverse the States and Territories in which most of them are located.

Bendire was a man of energy, perseverance and courage, and in our Indian wars naturally took a prominent part. This part was sometimes that of a dreaded foe who followed them relentlessly over mountain and desert and penetrated their most distant retreats; sometimes that of a peace-maker, as when in the midst of the bloody Apache war he boldly visited the camp of Cochise, the celebrated Apache chief, and induced him to abandon the war path. He treated the Indians, as he did everyone else, with perfect frankness and fairness, and never deceived them. They were not long in learning that they could rely absolutely on his word, which gave him a positive advantage in all his dealings with them, for they always respected him and when not at war liked him.

Aside from his movements in the field in connection with Indian wars, he led a number of expeditions for other purposes, such as laying out roads, surveying routes for telegraph lines, and exploring unknown country—as when he crossed the Death Valley in 1867, and explored the deserts of south-

central Nevada as far east as Pahrangat Valley. No other American Naturalist in modern times has spent half so much time in the field as Bendire, and his voluminous note books attest the accuracy and range of his observations.

It is hard work to say just when Bendire's scientific work began, or even exactly when he commenced making his famous collection of birds' eggs, though it is certain that he was collecting in 1870. Like many other army officers stationed in the West, he sent Professor Baird from time to time natural history specimens and notes. When stationed at St. Louis he became an intimate friend of the eminent botanist, Dr. George Engelmann, to whose herbarium he was a valued contributor.

His earliest published writings are in the form of letters to well-known naturalists, chiefly Allen, Baird and Brewer. The first volume of the Bulletin of the Nuttall Ornithological Club (1876) contains several such letters, published by J. A. Allen.

In 1877 he published an important paper on the Birds of Southeastern Oregon, based on three years' field work in the region around Fort Harney. In all, he has written about fifty papers, most of which relate to birds and their eggs, though several treat of mammals and fishes. But the work which will carry his name and fame to future generations is his "Life Histories of North American Birds," of which the second volume was reviewed SCIENCE not long ago (N. S. Vol. IV, No. 96, Oct. 30, 1896, pp. 657-658.) It is a calamity to the science of ornithology, for which he was in no way responsible, that the remaining volumes of this great work, which contains more original information on the habits of our birds than any other since the time of Audubon, Wilson and Nuttall, were not made ready for publication.

In his personal life Bendire was a

man of simple habits and unusual frankness. He had an inborn aversion for all kinds of circumlocution and insincerity, and was himself a model of directness and truthfulness. He was generous, kind hearted and ever ready to help others, no matter at how much personal inconvenience, if he believed them worthy. He had a large number of correspondents in all parts of the country who considered it a privilege to contribute notes and specimens for his use. These and many others will mourn his loss, but none so deeply as the small coterie who were so fortunate as to be numbered among his intimate personal friends.—*C. Hart Merriam, in "Science."*

Tyrant Flycatchers in New England.

There is probably no one family of birds, that gives the ornithologist as much trouble as the Flycatchers. Most of the species are of about the same size, and their colors mostly neutral—olive and white that is more or less pure, with occasional small and often indistinct spots of some brighter color; as the small spot of red on the Kingbird's crown for instance.

But they are Flycatchers, not fly-hunters, and it is the insect on the wing, not the crawling slug in the dirt, that concerns them, and constitutes their food. The very name suggests a lively time and it is hard to find one that is lazy, no matter how quiet it may be—and the latter, by the way is a very prevalent trait. Nevertheless they are very neat in appearance, except perhaps for the slight erectile crest, that is so prevalent among the family and which often gives them a dishevelled appearance.

There are only five of this species that might be called common in New England, viz: Least and Gráated-crested Flycatcher, Kingbird, Phoebe and Wood Pewee; and it is these five only that I

shall have to do with. There are, however, twelve species in all, common, in one sense, to New England; three of these are only stragglers from the west and south; and the other four are only occasional visitors which resemble other well known kinds. The most common of this latter class is the Yellow-bellied Flycatcher.

The Wood Pewee (*Contopus virens*) is found chiefly in woods, either dry or swampy; it prefers shade to sunshine, and tall trees to scrubby ones. Although it is often seen in orchards, it is generally one of that kind which is not taken care of and consequently attracts more insects on which it may live. In the evening it is likely to be found in the neighborhood of ponds and lakes. When once discovered, it may be easily studied, owing to its habit of returning to the same place at about the same time day after day.

It has the regular Flycatcher habit of capturing its prey. Selecting some post of observation, usually in this case from ten to forty feet from the ground, the Pewee sits and watches for any passing insect, and sighting it, glides gracefully downward, seizes the insect, and then returns to its post to wait for another, with a graceful upward curve. Oftentimes it sails leisurely into the air, and with outspread wings and an upward toss of the head, will sing as lazily as it can utter the syllables, the notes *pee-wee*; this is often shortened to *pee-u*.

It sings especially in the early morning and late evening, often when it is quite dark. In the neighborhood of New York, its song ceases at any time between the end of July and the end of August, although occasional songs are heard in September.

After the young have left the nest, the old birds separate, and though still frequenting the same localities they inhabited during the breeding season, yet they are seldom seen together, each seeming to avoid the other. They are

generally silent, and when approached are quite shy.

The Least Flycatcher (*Empidonax minimus*), or as it is called from its note *chebic*, is the smallest of all the flycatchers that can be found in New England, either as visitors or stragglers. Its average length is about five inches, but often a little less.

Its home is in orchards or on the edge of woodland, especially those composed of birch, maple or beeches. Dr. Coues says: "It is not ordinarily found in gloomy woods, nor even in heavy timber of any kind." When it has selected its home for the summer it often confines itself with some closeness to a single group of trees.

The *Chebec* has all the ordinary Flycatcher habits, such as flirting the tail, scolding in a harsh, unmusical voice, and dashing into the air to catch a flying insect. Its song note is a loud, emphatic but unmusical ery, closely resembling the syllables *chebic*; it is often written as *cadit* and *sewick*.

Mr. Nuttall states, and he is the only one that I ever heard of who did, that the *Chebec* has a quarrelsome disposition, and he has seen them molest other smaller birds. But I have never seen them molest the Summer Yellowbird (*Dendroica aestiva*) or Chipping Sparrow even when they nested in the same clump, or even in the same tree, as is often the case.

A true-born fighter is the Kingbird (*Tyrannus tyrannus*); and its special enemy seems to be the Crow. It always rises above its foe, and drops upon its back, "attacking it with both beak and claws, until the unlucky intruder makes off with ludicrous consternation." Not long ago I owned a very young Crow, and one day I was attracted by hearing a loud noise from it. Turning round, I saw my Crow sitting on the ground, with a Kingbird flying about it, and now and then darting down at it, as if pecking at it with its

beak. I drove it away two or three times, but as it seemed ill disposed to leave, I finally had to take the Crow indoors, for fear of its being hurt.

The Purple Martin is said to be the implacable enemy of the Kingbird, and one of the few birds with which the latter maintains an unequal contest. Its superiority in flight gives the former great advantages, and its equal courage and strength render it more than a match. Audubon relates an instance in which the Kingbird was killed in one of these struggles.

Parkhurst notes that in bathing it flies from its perch directly into the water, generally a small stream, dashes the water over its back and returns to its perch, repeating the performance several times. "It is perhaps this habit," he writes, "which has given rise to the unfounded idea that it feeds upon small fishes."

Before closing with the Kingbird, I can do no better than to quote from Mr. C. C. Abbott, in his book, "Bird-Land Echoes." He writes, "Very different is the Wood Pewee's cousin, the doughty Kingbird. Here we have a Flycatcher that is not retiring in its disposition; a bird of the open air; one that feels that it has a right in the world, and has the courage of its convictions. A lively bird that mostly squeaks, if moved to express itself, though it can sing in a humble way, it is said; but it makes amends for all vocal deficiencies by an exhibition of all the excellent qualities of bird-nature. A little too quarrelsome, perhaps; certainly so in the minds of Crows and the larger hawks, but from our standpoint this is a source of amusement, we not being directly interested. * * * * There is little danger of exaggeration in speaking of the Kingbird. It looks all that it is, and is all that it looks. It has a fancy for the open fields, and does not forget them when confined to a tree at nesting time. It likes the broad out-

look and the easy life it may then lead, whether chasing beetles in the sunshine or swinging on a bending mullein stalk."

The Phœbe or Pewit (*Sayornis phœbe*) is the most familiar of the family. Its comparatively fearless disposition and characteristic habits render it so. It frequents somewhat open ground, where insects are abundant, generally near a pond or stream; where, "perching on the branch of an overhanging tree, or on the railing of a bridge, or darting about in different directions, it busies itself through the day in catching the insects that swarm in myriads in such localities."

Its note is rather harsh and querulous, resembling the word *phœ-be*; the first syllable is smooth, the second rough and broken. Besides this common call-note, they are said to have during the love-season "a low twittering song with which they entertain their mates, but which is heard only when the birds are in company, and then only for a brief season."

Last but least, since it is the largest of the whole family, comes the Great-crested Flycatcher (*Myiarchus crinitus*). It is a rather rare and local bird; and both for this reason, and also because it leads a "wild, sky, and solitary life," is less often seen than the more abundant members of the same family. It is much oftener heard than seen; being at once recognized by its characteristic notes—one a harsh outcry of one syllable, in a high key; and others sounded in a guttural tone two or three times. It is said that this nearly or quite fails in July or early August, and the note is then single, faint, and somewhat mournful.

Opions seem to differ concerning its being quarrelsome. All who say anything about it admit that it is just as brave in defending its nest as the rest; but some say that it does not seem to always have a quarrel on hand, like its

cousin the Kingbird; while others say that it does, and has many of the peculiarities of that bird. As for myself, I favor the former opinion; but as the Great-crested is to me the favorite member of the family, my opinion may be a biased one.

GEO. ROBERTS, JR.,
Hartford, Conn.

Towhee's Nest "Off the Ground."

DEAR EDITOR:

Is the finding of a Towhee's nest "off the ground" too common an occurrence to be recorded in the OÖLOGIST?

June 5, 1896, I found a nest two feet up in a mass of tangled blackberry briars. I worked my way toward it, and merely glancing at the contents, said to myself, "Yellow-breasted Chat's." Before I had freed myself from the briars a female Towhee appeared and showed much uneasiness as if she had a nest near. Retiring to watch her, I was surprised to find her the owner of the nest I had just left. A moment later the three eggs were in my possession, where careful examination showed a faint bluish tinge in the ground-color and not glossy—therefore leaving no doubt as to their not being Chats', had no bird been seen. Markings very dark, far from having the "pinkish cast."

C. PIPER SMITH,
Anderson, Ind.

A Correction.

In my article, "Maryland Birds that interest the Sportsman," published in THE OÖLOGIST, March-April, 1894, I had *Chen hyperborea*, whereas it should have read, *Chen hyperborea nivalis* (FORST). Greater Snow Goose.

WM. H. FISHER,
Baltimore, Md.

Ripans Tabules cure dyspepsia.

Ripans Tabules cure headache.

THE OÖLOGIST.

A Monthly Magazine Devoted to

OÖLOGY AND ORNITHOLOGY.

FRANK H. LATTIN, Editor and Publisher,

ALBION, N. Y.

Correspondence and items of interest to the student of Birds, their Nests and Eggs, solicited from all.

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A Day With the Raptiores.

An early hour on the morning of May 11, 1895 found my friend Mr. M. B. Griffing and myself ready to start for a day's collecting after the Raptiores.

The day was perfect. Not a cloud in the sky and it promised to be pretty warm before sunset.

We started for Sachem's Neck and arrived there about 8:00 a. m. My first nest was one of the American Osprey (*Pandion haliaetus carolinensis*), situated in a pine tree and about thirty-five feet

up. It was composed of sticks, pieces of sod, corn-stalks and sea-weed, in fact almost any kind of rubbish.

The climb was easy and I was soon looking on the two large eggs which the nest contained. They were a deep cream color, spotted and splashed with several shades of brown; the larger end being entirely obscured by the markings. Packing these I descended the tree and was soon joined by Mr. Griffing who had secured a fine set of three Osprey's from a large cherry tree which stood near a deserted barn.

Traveling east from here we reached a strip of woods and a few minutes later my friend called out that he had found a nest of Cooper's Hawk (*Accipiter cooperi*). Going over to him I climbed the tree and saw four white eggs in the nest. These we left for a while to make certain of the identity and hid in some thick undergrowth. The old bird came back presently and we were then sure of our find. The nest was composed entirely of small twigs and was situated in a beech tree about thirty-five feet up. The eggs are white slightly marked with faint spots of light brown and lavender. Packing up we started on our course which now lay along Gardiner's Bay.

After proceeding a short way we came to our next nest which was one of the Osprey. It was situated in a black gum tree forty-five feet from the ground and on the end of a limb ten feet from the trunk of the tree. Adjusting my climbers I was soon standing in the nest which was an immense affair probably the accumulation of years of nest building. It contained a set of four eggs, ground color, a peculiar shade of brown spotted with chocolate-brown. In 1894 I took a set of two eggs from this same nest which were similar in color and markings. After carefully measuring the nest I climbed down and we continued on our way.

The next was on a pine stub and contained three eggs. The nest was only twelve feet up. The eggs are white, spotted and blotched with brown. The blotches covered the larger end of two of the eggs and the smaller end of the third.

The next two nests were situated in black gum trees and contained three eggs each. The first nest was forty feet from the ground and on the end of a limb which projected out thirty feet, the nest being placed near the end. This was one of the most dangerous climbs I ever took. The eggs in both nests were similar to those found in the first nest I described.

As it was getting toward noon and we were tired and hungry we stopped to eat our lunch and take a rest. There is no water fit to drink here and we had to carry what we needed with us. After lunch our supply was exhausted and we suffered greatly from the intense heat and burning thirst for the rest of the day. But being good egg-cranks we were willing to put up with these slight inconveniences. After lunch we dug a Kingfisher (*Ceryle alcyon*) out of his burrow and obtained a set of six fresh, pearly white eggs.

We now proceeded inland and stopped at the next nest, which on our climbing the tree proved to contain only one egg which we left desiring only full sets.

We now found ourselves in a large piece of woods which we canvassed thoroughly until we found the nest of a Red-tailed Hawk (*Buteo borealis*). This we climbed to and found it to contain only one egg which we left intending to return in a few days and collect the full set. Returning a week later we found only one egg so concluded it was a complete set.

Toward sunset we came out on a large field thickly covered with brush, sitting down on the edge of the woods were a pair of Marsh Hawks (*Circus*

hudsonius) sailing about. Soon one sank down in the bushes and we knew we had another set. Leaving Griffing to get this I went back into the woods a short distance where I had seen a Crow's nest. The nest contained six eggs of *Corvus americanus* and were typical eggs of that species.

On returning to where I had left my traps I saw Griffing carefully following a straight line from the point where I was sitting to the place where the Hawk had descended. Suddenly the Hawk started up and after a few minutes search Griffing came back with a fine set of six fresh eggs, greenish-white in color spotted very faintly with pale brown and lilac, one of the eggs was immaculate. The nest was situated on the ground and was built entirely of dried grass.

Packing up we started home very tired but very happy. We arrived after dark and after partaking of a good supper we blew our eggs and wrote the notes for the day and then retired to rest and to dream of Hummingbird and ostrich eggs in the same nest.

R. C. WOODHOUSE,
New York City.

Observe Bird Day.

Superintendant Jordan has issued issued the following recommendations for the observance of bird day in the schools of the state:

The legislature has passed an act for the protection of song birds, and it is now a law. This movement is in response to a growing sentiment of humanity, demanding that the cruel and useless destruction of these happy and charming creatures shall be stopped. A similar law has been enacted in several of the Southern states and in many of the Northern and Western states. In order to bring children to a proper appreciation of the merits of this subject, days have been set apart in the

schools for the study of birds, their habits, uses and principles of kindness and protection that should be accorded them.

At the request of Mrs. M. S. Stephen-
son of Helena, Ark., who has taken the
lead in this matter, in response to the
generous sentiment that is now abroad
in our state in this behalf, I beg to sug-
gest a programme of work for those
schools which choose to take an inter-
est in the cause; so that by April 24, a
uniformity in celebration may be ob-
served. The programme is merely sug-
gestive, and teachers are at liberty to
use their own judgement, as to any part
of it or all of it, varying the time and
subjects prior to the 24th of April as
they may deem proper. This is not a
proclamation or an order under any
law, as this office has no authority to
take such a course; but it is simply an
advisory method of bringing to the atten-
tion of our schools that principle of
humane treatment of birds that is now
recognized as worthy of the attention
of our legislative authorities.

Submitted herewith is the following
programme for Friday exercises to be
arranged for classes and varied as the
teacher judges most suitable:

Friday, March 26, 2 p. m.—

(a) Name the birds in your county.

(b) Describe some particular bird, its
habits, mode of living, nest building,
etc.

(c) Stories of birds, oral and written.

Friday, April 2, 2 p. m.—

(a) Home birds; migratory birds, accom-
panied by stories and poems from
authors. Habits and dates for coming
and going.

(b) Aquatic birds; birds of the ocean,
lakes and swamps.

April 9, 2 p. m.—

(a) Usefulness of birds; protection of
birds; moral principle of kindness to-
wards them.

(b) Birds as harbingers of the weath-

er and seasons; birds that may be edu-
cated or trained.

April 16, 2 p. m.—

(a) Birds peculiar to certain sections
of the United States.

(b) Classify game birds, song birds,
gregarious birds, insectivorous birds.

April 23—

(a) Birds that are noted in history,
emblems of heraldry, warriors, nations.

(b) Birds that children have seen at
shows, not natives of this country,
where from?

(c) Stories and poems recited by class
and lectured by teachers.

JUNIUS JORDAN.

Superintendent of Public Instruction.

Following is a full text of the bill as
approved by the governor:

Be it enacted by the general assembly
of the state of Arkansas:

Section 1. It shall be unlawful for
any person within the state of Arkansas
to kill wound or injure any wild bird,
other than the game birds, or to des-
troy, disturb or rob the nests of any
such birds, or to sell or expose for sale,
either dead or alive, any of such birds,
and it shall be unlawful for any rail-
road company, express company, steam-
boat company, or other company or
corporation, or private person, their
agents, employes or servants, to have
in possession or receive for transporta-
tion or carriage or for any other pur-
poses whatever, any such birds or eggs;
but this section shall not apply to Eng-
lish Sparrows, Crows, Blackbirds,
Hawks, Owls, Eagles and other birds of
prey, nor shall it prohibit any person
from killing any such birds on his own
premises, when in the act of destroying
fruit or other crops.

Sec. 2. That this act shall take effect
from and after its passage.

Approved March 16, 1897.—*From the
Arkansas Democrat.*



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Small collection fine sets, 15 species, with data, including 9, 11, 12, 126, 182, 184, 199, 278, 294, 325, 337b, 360a, 373, 478a, and 707, cataloguing over \$30, for \$7.50 delivered.

EUGENE S. ROLFE,
MINNEWAUKAN, N. DAK.

Rare Eggs.

Last year Stanford University, of California, sent an expedition to Cape St. Lucas. They brought back many rare eggs, and I have secured all the duplicates except such as went to Capt. Bendeire. I have a number of extra ones in sets to sell, (none to trade) including fine series of White Winged Dove, Murre, Ground Dove—probably new subspecies—St. Lucas, Cactus Wren, Scott's Oriole, Hooded Oriole, Texas Night Hawk, a splendid series of St. Lucas Thrasher, Valley Quail (probably new subspecies); St. Lucas House Finch, Texas Cardinal, (probably new sub-species) and several others. Skins from this collection may be obtained of C. K. Worthen of Warsaw, Ill.

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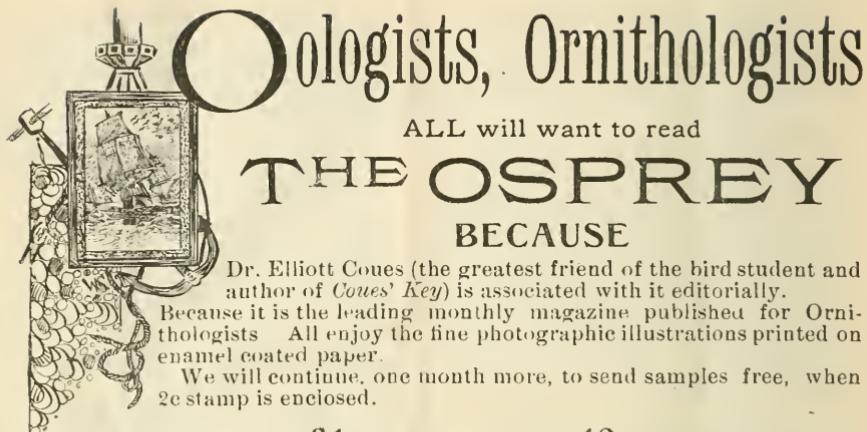
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Monthly.

VOL. XIV. NO. 5.

ALBION, N. Y., MAY, 1897.

WHOLE NO. 132

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Address,

Ernest H. Short, Albion, N. Y.

THE OÖLOGIST.

VOL. XIV. NO. 5.

ALBION, N. Y., MAY, 1897.

WHOLE NO. 132

The Bobolink in Literary Fields and Fields of Grass and Clover.

Who that has visited the country when it was full of the blossom and beauty of May and June, is not acquainted with the bobolink! and who having wandered in the pleasant fields of out-door literature has not met with him there also? The poets, who have paid any attention to nature at all, have fallen in love with this little feathered poet of the meadows, and right royally has he favored by their inspiration. Doubtless no bird, save the mockingbird of the South has been equally praised and embalmed in our literature; well might our other birds envy him his position.

An article which would contain any portion of the interesting and pretty things which have been written about him, however pleasant it might be to read, would be all to long. Being too far from a large library and with only a few notes made from time to time, I must necessarily miss many of the best quotations although those given will doubtless be sufficient for the present article.

The bobolink comes to us in this region a few days before the close of April and is at least always here tree he close of May day. In 1893 he came rollicking into our landscape on April 29th; in 1894 he appeared at noon May 1st, while April 30th brought him in 1895, and April 24th in 1896 and one day later this spring.

From the very day of his arrival he is tipsy with song. I think those verses in Emily Dickenson's poem must apply only to him.

I taste a liquor never brewed
In vats upon the Rhine
No tankard ever held a draught
Of alcohol like mine.

Inebriate of air am I
And debaucher of dew
Reeling through endless summer days
From courts of molten blue.

He is a handsome little feathered dandy in black and buff and white, as he waltzes quaintly on the fence to his own ecstatic music. And you recall William Cullen Bryant's poem "Robert of Lincoln," familiar to every school-child.

Robert of Lincoln is gayly dressed,
Wearing a bright black wedding coat;
White are his shoulders, and white his crest,
Hear him call in his merry note:
Bob-o link, Bob-o-link,
Spink, spank, spink.
Look what a nice new coat is mine:
Sure there was never a bird so fine.
Chee, chee, chee.

This may not be a good interpretation of his song, but a perfect transcript of it has not yet been written. This poet of nature calls him "prince of braggarts." He certainly appears to court observation, being in no wise a shy or retiring bird. What farmer so inobservant as never to have heard or seen this bird sing! For it is worth while to watch his movements for there is music in them too, as he spills his merry strains on the morning air. He is music all over. Nothing can dampen his rapturous and ever bubbling joy in life. He sings alike sitting, on the wing, chasing his plain brown mate or an equally voluble rival, in reckless flight. I have many a time caught him singing in the rain, and singing even while he held a writhing worm in his bill which he had captured for the baby birds. He is at his song feast early in the morning, at it all day; and the last thing in the evening ere the shadows are too long, his tinkling strains came up from distant meadows.

Some unknown writer thus characterizes his enchanting song:

"That rollicking, jubilant whistle
That rolls like a brooklet along—
That sweet flageolet of the meadows
The bubbling, bobolink song."

How he escorts you with music along those acres of meadow-land which he has selected for his domain. He is the very soul and spokesman of pastoral scenery; filled to the brim is that little goblet of feathers with the ecstasy of country living and country thinking. He is enough in himself to woo all the cities out into the country. He invites the rustic naturalist to leave the scenes of vernal toil, and wander off over green fields into green woods; for his song is an invitation to idleness. Washington Irving in that essay "The Birds of Spring," where he touches the bobolink in his ever happy and sunny strain, mentions what feelings he had "when luckless urchin! was doomed to be mewed up, during the live long day, in a school-room. It seemed as if the little varlet mocked at me as he flew by in full song, and sought to taunt me with his happy lot. Oh! how I envied him! No lessons, no tasks, no schools; nothing but holiday, frolic, green fields and fine weather."

C. P. Cranch has given us the poetic origin of "the Bobolink."

When Nature had made all her birds
With no more cares to think on,
She gave a rippling laugh, and out
There flew a Bobolink on.

She laughed again, out flew a mate
A breeze of Eden bore them
Across the fields of Paradise
The sun rise reddening o'er them."

Lansing V. Hall, a blind poet, sings of our bird:

"But of all their merry jingle
In meadow or the dingle
The Bobolinks' cadenza does excel."

He has also a long poem on the "Song of the Bobolink" which opens with these lines "to be read rapidly:"

"June may kindle, kindle with her sunshine,
And her heat, till this is wheat, till this is wheat,
For Bobolink and Mrs. Bobolink very sweet,
.. And good to eat, and good to eat."

This purports to be an interpretation of Bobolinks' song into words.

J. G. Whittier makes an old character in a poem "The Sycamore" to say quaint things of our bird:

"Jolliest of our birds of singing
Best he loved the Bob-o-link.
'Hush!' he'd say, 'the tipsy fairies!
Hear the little folks in drink!'"

And in other places in the works of our Quaker bard who portrays nature so happily, do we find the Bobolink.

J. H. Langille thinks; "It is difficult to speak of the Bobolink without going into ecstasies. To say the least he is the finest bird of our field and meadows." And he proceeds in that entertaining volume, "Our Birds in Their Haunts," to give a beautiful description of the bird its song and manners. Take this exquisite description of its song for an example: The first tinkling tones are like those of a fine musical box rapidly struck, then come the longer drawn notes as of a rich viol or violin, and finally the sweet liquid, limped, gurgling sounds as of an exquisite bell-toned piano lightly and skillfully touched. These several different strains, variously modulated are uttered with a rapid, gushing volubility, which to an untrained ear might sound like the performances of a whole chorus of songsters."

How sweet is this song delivered while he quivers through the air on trembling wings. And as he closes you often see him drop into the green bosom of the meadow like a failing leaf or drifting feather his motionless wings held at a sharp angle. This is a pretty sight only equaled when he sings on a fence or clump of grass with wings raised so that he reminds you of pictures of cherubims you have seen.

Perhaps the finest passage touching

the Bobolink is that in James Russell Lowell's Biglow Papers.

"June's bird's man, poet o' the year,
Gladness on wings, the Bobolink is here;
Half hid in tip-top apple-blooms he sings
Or climbs against the breeze on quivern' wings
Or givin' way to't in a mock despair,
Runs down a brook o' laughter thro' the air."

And in the same poet's "Under the Willows" is the following enthusiasm over "June's Bridesman:"

But now, O rapture! sunshine winged and voiced,
Pipe blown through by the warm wild breath
of the west
Shepherding his soft droves of fleecy cloud,
Gladness of woods, skies, waters, all in one,
The Bobolink has come, and like the soul
Of the sweet season vocal in a bird.
Gurgles in ecstasy we know not what
Save June! Dear June! Now God be praised
for June.

The plain brown yellow female is just as sky, silent and retiring as her little lord is noisy, attractive and conspicuous. And so little are they together that you might take him for a bachelor bird with no wife or rising family in all the meadow. But it appears his duty to draw all curiosity from his seclusive mate and her well hidden nest unto himself, and if this be true how admirably is he fitted to do it. Not a bird is more worthy your observation or will better repay you for a little watching. I now draw on one of my field note books for June 22, 1896. Just the other afternoon a male Bobolink flew up out of the grass of a road side meadow a little ahead of me and alighting on a fence rail with his odd buff crest puffed and wings raised began to "bow and scrape" after his funny fashion, singing with all his wanted energy and enthusiasm. Then he dashed off into the elm and sang, then up into its higher branches and sang, then he dropped down into a bush less than ten feet from me; thus singing and changing his position as I moved leisurely along the road; singing now in bush or tree now in the air as he flew, he filled every

pause with song and accompanied me twenty or thirty rods up the road. It certainly looked like a ruse on the part of the little musician escorting me along the borders of his territory. Was he trying to coax me away from the spot where Mrs. Bobolink sat in her nest or tended the birdies or was he only giving an exhibition of his dainty and quaint self, or was all this music the way he had of scolding me out of his neighborhood?—certainly a delightful dose of scolding to take and may no one ever be inflicted with any more bitter—which of these conclusions is the answer to his actions I leave for the reader to decide by his observation.

Dr. J. M. Wheaton gives a happy description of the Bobolink singing:

"While singing he raises and depresses his feathers, seems to contract and expand his whole body, bows, nods, shrugs, till he resembles a French dancing-master in uniform, singing, fiddling dancing and calling off at the same time."

Who would find the Bobolink's nest must have patience and some experience at nest finding. It is usually very well concealed the thickest clump of grass or clover in some deep depression, and the eggs five sometimes six or seven are well marked and colored to harmonize with the ground; and as the female runs off from the nest through the grass before taking wing you need not think the nest is somewhere near the spot whence you saw her fly. If you would find the Bobolink's nest go out in the early dawn of a June morning when the whole world is fresh in the jewelry of a heavy dew. When the emerald lights of the eastern sky have scarcely begun to melt into the roses of dawn, ere yet the clover has opened its pink lips or unclasped its hands which all night were folded as in prayer. Go then into the meadows when a new day is in the bud, and when Mrs. Bobolink leaves her nest on foot at your ap-

proach, she leaves a dark trial of brush-ed-away-drops in the white dew and you may find her basket of eggs snugly concealed at the foot of that "white-top" or "black-eyed Susan," simply by following back her trial.

I have found the Bobolink's nest June 5th with young just beginning to show the tips of their cunning feathers, and have found them flying eleven days later. This was a little earlier for this locality. But as they raise but one brood it is evidently necessary, that this one be safely and quickly—that is early in the season—raised, so that they may escape the earliest hay making. And though the hay maker may find the empty nest, he will but very seldom happen upon one containing eggs or young. This will only occur when some mishap has retarded a pair. As the Bobolink is characteristic of the fairest and sweetest season, coming to us in time to sing from the top sprays of our bloom-laden orchards, voicing the bucolies of strawberry-time, and sheep washing and shearing, it is fit that we lose him when the first freshness and flowers of spring are gone, and hotter summer comes like a nut brown gipsy. By the fourth of July the Bobolink's wild bubbling song shows signs of waning. It is only a song of broken bars now. He starts his jingle as bravely as erewhile he did, but before he has gone far he appears to grow absent minded, for his song snaps and he relapses into silence. Again he tries it with no better result. Tomorrow he will not get so far as he can today. His power of song is slipping from him. He feels the coming change, he is degenerating into a grating, metallic voiced seed eating, russet-yellow "reed bird." He who was a sweet singing insect-feeder. By the twentieth of the month I hear his tipsy roundelay no more. He has ceased to revel in the taverns of clover and "flea-bane;" his music box is closed, his harp unstrung.

The rare intoxicating wine of May and the mead of June are gone now, and the little debaucher will quaff nothing less sweet or pure, and henceforth is sober and silent. And whether he moults as some think or whether the black fades out of his plumage as others hold, he soon loses his suit of black already worn, and becomes the plain brown "Reed-bird" even in this country. And when he leaves us in early September or latter August, we say with Bryant:

"When you can pipe that merry old strain
Robert of Lincoln come back again."

After the "Reed-bird" he becomes the "Rice-bird" of the south, then the "Butter-bird" of the West Indies, as Washington Irving says, "He has become a bon vivant a gourmand; with him now there is nothing like the "joys" of the table." In a little while he grows tired of plain homely fare, and is off on a gastronomic tour in quest of foreign luxuries. Such is the story of the Bobolink; nice spiritual, musical, admired, the joy of the meadows, and the favorite bird of spring; finally a gross little sensualist, who expiates his sensuality in the larder."

We are happy in this latitude in entertaining "the vivacious, volatile and eccentric Boboliuk" as Dr. Elliott Coues calls him, in the happiest and most beautiful and useful stage of his motley career, for with us he is the insectivorous songster through the breeding season. We scarcely understand the meaning of his specific scientific name *oryzivorus*—I devour rice.

ERNEST WATERS VICKERS,
Mahoning Co., Ohio.

ONE OF HUNDREDS.—Thank you for the start you gave me in the scientific study of birds and their eggs. I owe it all to ad. you had in the *Youth's Companion* about eight years ago. Have taken the OÖLOGIST since Aug., 1890. I have them bound together and was reading in them just the other day.—Wm. C. THRO.

THE OÖLOGIST.

A Monthly Magazine Devoted to
OÖLOGY AND ORNITHOLOGY.

FRANK H. LATTIN, Editor and Publisher,
ALBION, N. Y.

Correspondence and items of interest to the student of Birds, their Nests and Eggs, solicited from all.

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Albion, Orleans Co., N. Y.

tination, at the farm, where I am to spend a week in the pleasant occupation of collecting and taking notes on natural history.

Followed along the lake shore; flushed a cock Quail; secured a male Orchard Oriole in immature plumage and also a brace of female Cowbirds. All of which I need for my collection, as there are many common birds which I have failed to secure as yet. It is generally so with all collectors—and there are only a few veterans who are fully supplied with all that a neighborhood affords.

Took a perfect set of seven beautiful eggs of the Chickadee. The nest was built in a small hollow in a dead stump. Both birds seen. Nest of dried moss, still green in color, and rabbit's hair. I have often found nests composed of these two substances. A little further on I met with a pair of nervous, misleading Killdeers in a field adjoining the lake, and by an hour's patient watching found their two eggs, which of course left until the set should be complete. Shot a fine Marsh Hawk, picked up a fresh set of Grass Finch's eggs and arrived at the farm without further adventure.

Found a welcome awaiting me at the house and much to talk of, but I quickly excused myself, and went down to the boat house where, I was to skin my birds and also to bunk by preference. Arranged my traps; put my table, instruments, gun and ammunition in order, and then began work at once. By dinner time I had placed everything to my satisfaction and also added two Least Sandpipers and a Scarlet Tanager to my list. After dinner spent a half hour visiting with the family and then measured my specimens, wrote out data and skinned my birds. Followed this by blowing my eggs—an undertaking which was pleasantly lengthened, by the appearance of a neighbor's boy, who appreciative of the

ENTERED AT THE POST OFFICE AT ALBION, N. Y., AS SECOND-CLASS MATTER.

A Collector's Diary.

A week's collecting around a lake in Michigan—being a correct record of happenings as they occurred a few years back. A trip of this nature has never been reported in your paper, and I thought that a week's continuous events might interest your readers.

May 18 Took 8 a. m. train for the lake. Arrived safely and found team awaiting my coming. Was too eager for woodland rambling to ride—so loaded my traps into the wagon, and then took my gun and struck across the country, a couple of miles, for my des-

fact, that there was a collector around, came in with a set of seven Kingfisher's and four rare Robin's eggs. "Small favors thankfully received" —says I, and then fell to praising the color of the Robin's eggs. My rule is; 'never to refuse anything when well meant.'

At five o'clock I went trolling with my companion, and at half after six we returned with three two-pound bass, six beautiful Blue-backed Swallows and an American Bittern which we shot at the upper end of the lake.

Supper over, I could not leave the family of my kind host, and so spent the evening in the house, only retiring to my airy quarters at ten o'clock and after being assured that I would be devoured by the wild beasts. Spent an hour skinning birds and then went to sleep on my canvas stretcher, lulled by the sound of gentle waves washing against the side of my combined summer bed-room and laboratory.

May 19. Breakfast over at 6 a. m. Took fine sets of eggs of Chipping Sparrow, Pewee and Barn Swallow and marked nests of Bobolink, Vireo, Kingbird and Spotted Sandpiper, which had not the complements. Skinned birds at seven and all through at nine. Took gun and twelve shells and went across the lake. Secured a pair of Blue-winged Teal, a Woodcock, four Scarlet Tanagers, a Rose-breasted Grosbeak, Red-bellied Woodpecker and a Blue Jay. Took nests and eggs of Jay, Grosbeak and six sets of eggs of the White-bellied or Blue-backed Swallow. The latter were all built in stumps near water; from eight to twenty feet up. The nests were mainly composed of feathers. It was interesting to drop the feathers from the stumps and see them snatched up on the fly before they reached the water. These Swallows lay from five to seven pure white eggs. They are exceedingly fragile.

On my way back held the line in my teeth and trolled. Caught a bass of

three pounds and was so elated that I decided to troll up the lake. Spent an hour uselessly—as there is seldom any sense in trolling anywhere near noon. Shot Pied-bill Grebe, Hell Driver for short, which I sneaked on and shot before it recognized my presence, and therefore had no chance to dive at the flash. Spent another foolish hour trying to corner a wounded Butier-ball Duck. Dinner bell rang and I hustled to the house with an appetite like a Hawk.

Skinned birds till four p. m. and thereafter sat in the grove and took notes on movements of several birds. Located several nests in course of construction, among which were Orchard and Baltimore Orioles, Red-eyed Vireo and Great-crested Flycatcher. Secured full sets of Flicker, Spotted Sandpiper and Cooper's Hawk and shot the birds in each case. Also spent a good hour looking vainly for nest of the Horned Lark—Prairie variety. When I reached the house found I was far too late for supper. Worked till nine and went to sleep.

May 20. Set my alarm clock so that I was up at 4 a. m. Skinned all my birds and blew all the eggs but two incubated sets, by the time bell rung for breakfast. Then Rob and I went to a famous place in the heavy timber, about two miles away. We carried a lunch and were prepared for the day. On our way we shot three common Snipe, two Hummers and a belated Night-hawk. Reaching the woods we were right in the business and quickly secured six species of late migrating Warblers including Bay-breasted, Black-and-yellow and Cape May.

Took two sets of Rose-breasted Grosbeak, three of Wood Thrush and one of three eggs of Ovenbird. At the edge of a little lake we found two nests of Sora Rail containing seven and eight eggs, which we left for complements. Shot several Rails of the Sora and Vir-

ginia species and also a King Rail, which is rare for these parts.

In the woods again, found nest of Hairy Woodpecker containing young. Just my luck. I have not a perfect set of eggs. Climbed a big beech to a Red-tailed Hawk's nest and found young. Took set of three eggs from a Cooper Hawk's nest. They lay four or five generally, but can't afford to climb a tree twice.

Rob kept shooting and shooting and I could not head him off. It is a warm day and the birds will spoil if I don't sit up all night at work, as I can't afford to let any birds waste. Best way to head him off is to start back.

Going back at about two p. m. we shot two Field Plovers and a Lincoln's Finch, the latter a rare bird for us. Took a late but fresh set of White-rumped Shrike's eggs, and also three of the Least Flycatcher, and two nests of the Song Sparrow. Spent a half hour digging out a Kingfisher's nest and found six oddly shaped young. We had better luck with another nest of the same species a mile further on.

Arrived at home found that I had sixty-eight eggs to blow and forty-one birds to skin. Fortunately the ice-house is an excellent place to preserve birds and I forthwith deposited half of my days shoot there. Beginning at four p. m. I worked steadily till midnight to prepare twenty-two bird skins—and then turned in—a very tired man.

May 21. It was with difficulty that I hustled to breakfast, but was quickly myself again after a square meal. Worked steadily on my bird's skins and eggs till dinner time. At two o'clock took a row up to head of lake and shot a fine specimen of the Whistling Swan with a charge of big buck shot. It was at a great distance, and simply a chance shot. The huge fellow, one of four in the group, was only wounded, but continued settling and falling behind his companions. Rowed down the lake

over two miles and came to where the Swan was resting in a lot of reeds at edge of water. A single discharge with No. 6 laid out the gallant bird, which measured nearly seven feet from tip to tip.

Trolled back and caught a fine big-mouth black bass. Took me from four till eleven o'clock to skin and clean the huge White Swan. Had an interesting dissection in tracing out the peculiar course of the trachea, which makes some bends and buries itself in the bony structure of the sternum, and has a remarkable course to the lungs.

May 22—Sunday. Did no collecting, but took a long and agreeable stroll and could not help marking down a few nests for future attention. Observed a towering Snipe.

May 23. Took over ninety eggs and spent the day among the birds. My last day out for the season.

May 24. Packed up my eggs, tagged all my bird skins, which I am to leave locked in the boat house till they thoroughly dry. Have 117 good bird skins, including six new species for my collection, and 234 eggs, but no new kinds. Reached home much improved as to my health, but sorrowful to think I could not stay longer.

EUGENE PERICLES.

Red-tailed and Red-shouldered Hawks.

In the March OÖLOGIST I find an interesting article from the pen of Mr. Ernest H. Short on the occurrence of both species of Hawks in Western New York which prompts me to give my experience, that somewhat differs with that of Mr. Short.

In the vicinity of Buffalo, Erie Co., say in a radius of 16 or 18 miles I found the following:

In 1891, May 17, the nest of a pair of Red-tailed Hawk with young.

In 1892 from April 24 to May 1, 3 sets.

In 1893 from April 9 to May 21, 5 sets.

In 1894 from April 1 to May 13, 11 sets.
 In 1895 from April 9 to May 12, 8 sets.
 In 1896 from April 12 to 26, 7 sets.
 In all 35 sets ranging from 1 to 3 eggs
 in a clutch.

Red-shouldered Hawk:

In 1891, May 1, 2 sets.

In 1892 from April 29 to May 16, 2 sets.
 In 1893 from April 24 to May 14, 3 sets.
 In 1894 from April 30 to May 6, 10 sets.
 In 1895 from April 20 to May 12, 14 sets
 In 1896, April 25, 1 set.

In all 32 sets, most sets of 3 or 4 and
 in only one instance a clutch of 5 eggs.

This shows that the Red-tailed Hawks
 start breeding three weeks earlier than
 the Red-shouldered Hawk and I am
 further led to believe that each pair of
 Hawks needs about from three to four
 square miles of territory for their sub-
 sistance. For three years I have taken
 sets of the same pair of Hawks and
 strange to say, almost the same mark-
 ings are on each years clutch. I have
 encountered some very difficult trees
 to climb particularly shell-bark hickory.

EDWARD REINEKE,
 Buffalo, N. Y.

Collecting Eggs of Scarlet Tanager.

Mr. Gibbs' remarks in December, '94,
 OÖLOGIST suggested that perhaps my
 way of getting eggs from such situa-
 tions might be new to some. Take a
 long pole or two, if necessary, spliced;
 tie a tin pail of large enough size to the
 end, fill same nearly full of broken cot-
 ton or similar substance. One person
 raises the pail to one edge of nest while
 another raises the other edge, when
 the eggs roll out on the cotton. Shift
 the pail as they come that they may
 not strike each other. Try it.

E. H. SHORT.

A Handy Tool.

There are few collectors who do not
 sometimes need a ladle in collecting

the eggs of Woodpeckers, Flickers,
 Owls, Kingfishers, Swallows, etc.

Any person can make the following
 ladle without any cost: Take a piece
 of wire (not too heavy) and bend it
 around and twist it leaving a loop in
 the end.

To this loop fasten a piece of cloth,
 making a small bag. The great advan-
 tage of this ladle is that the handle
 may be bent, so that it will fit a hole of
 almost any size or shape.

HERVEY M. HOSKINS,
 Newburg, Oreg.

For Inaccessible Nests.

Take a piece of wire 16 inches long.
 Make a ring in the middle 1 inch in
 diameter and twist the free ends to-
 gether until you have a wire "stem" 4
 inches long. Then fasten to a light
 bamboo pole with the rest of the wire.
 Cover your ring with muslin making
 the bag $1\frac{1}{2}$ inch deep. Bend the stem at
right angles to your pole. Now go to
 that inaccessible Vireo's nest, get as
 near it as possible and put in your net.
 With a "twist of the wrist" you can get
 out the eggs as safely as you would
 take Bobolink's. HENRY R. BUCK.

A Collecting Contrivance.

For securing quickly the eggs of Hum-
 mingbirds, Gnatcatchers and the like, I
 send the following device. Make a
 jointed pole from 4 pieces of pine each
 six feet or more in length by fitting fer-
 rules on the end of each. Saw a split
 seven inches long in one end of the
 pole, spread this apart and fit on pivots
 a small mirror. It can be quickly
 seen if there are any eggs in the nest,
 if so suspend a thickly lined basket on
 the end and gently tip up eggs into it,
 where they will nearly always land
 safely.

C. L. GRANT.

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If you are not fully satisfied, your money will be cheerfully refunded.

Beware of imitations. Mention THE OOLOGIST and address.

**MORRIS GIBBS, M. D.,
KALAMAZOO, MICH.**

This month's OOLOGIST was mailed subscribers on May 29.

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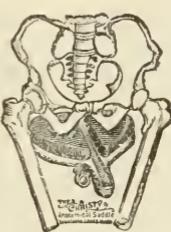
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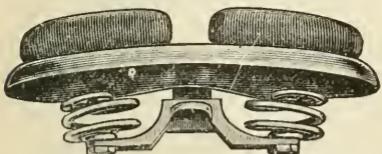
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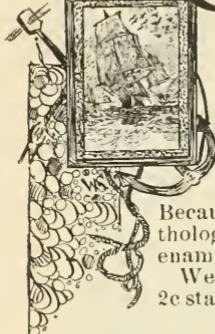
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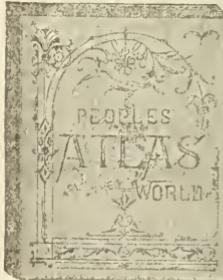
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THE OÖLOGIST.

VOL. XIV. NO. 6.

ALBION, N. Y., JUNE, 1897.

WHOLE No. 133.

Gull Island, New York.

At 4 o'clock on the morning of June 15, 1893, Mr. H. B. Sargent and myself were aroused by Mr. W. W. Worthington of Shelter Island, New York, with whom we were staying, calling to us to hurry and get dressed, as the weather was clear and we would start for Gull Island in about an hour. You can well imagine that this brought me to my feet in short order, and Mr. Sargent was not long in following my example. We took a hurried breakfast and taking our guns, ammunition, collecting basket and a few other necessary articles started for the boat. We arrived at the boat-landing, where our boat fastened, at about half-past five, and stowing away our guns and basket we took off our coats and set to work to hoist the sail and lower the center-board and started for Gull Island. We had no more than started when the wind gave out, and a light fog settled down over the water, then the fun commenced. We put out the sweep (which is a very large oar, and generally takes two men to work it) and commenced to work. When we got around the point which forms the Harbor, we steered in near shore to avoid the tide, which runs like a mill race when it is at its height. We moved along slowly working the sweep and praying for a breeze, when all of a sudden we found ourselves aground on the rocks. We worked hard and finally succeeded in getting off again, after that we steered further out. I will not trouble my readers, "that is if I have any," with a long account of the voyage, save to say with rowing, and with now and then a little breeze, we arrived within half a mile of Gull Island about twenty minutes to four in the afternoon. Gull Island is

separated from Plum Island by a broad stretch of water called the Little Race. Gull Island is a small plateau, rising about twenty feet above high water. It is about five acres in extent. A sandy beach runs nearly around the island, but in one place the sand is replaced by high rocks, tumbled about in wild disorder, showing how the great work of the sea has been going on for ages and ages, wearing away the strongest rocks, which gradually crumble before its mighty hand. Gull Island was once beyond a doubt part of Long Island.

We dropped anchor about a hundred yards from the island and lowered sail. Getting into the little boat, which we towed behind, we were soon all stand-on the beach. We had left our guns in the boat, preferring not to use them until after we had collected the eggs. As we walked up the beach the Terns rose up in numbers flying high in the air far out of gun shot, perhaps a few hundred pairs in all. Oh! what a difference there was between the number now and the number in the following extract, copied from Davies' "Nests and Eggs of North American Birds."

"Although a few Wilson's Terns breed on nearly every sandy point near here, Gull Island, situated a mile or two east of Plum Island, is their chief breeding ground in this section.

Here they breed in thousands fairly filling the air when you land and disturb them. They place their nests all over the island above high water line, on the beach and in the garden cultivated by the lighthouse keeper. Fresh eggs can be obtained from the 10th of June till the middle of July, as egg parties keep them cleaned off about as fast as they are laid."

The above was written by Mr. Worthington in 1881.

What has caused this vast decrease in numbers? Is it science? Nay, it is not science, it is fashion. Fashion, whose bloodthirsty cries for our feathered beauties is fast decreasing their numbers, where thousands bred now hundreds breed, and where hundreds bred now only a few pairs remain, and the time is fast approaching when the feathered race will entirely disappear from the face of the earth, leaving only pleasant memories behind to mark their former existence. Memories, which will descend from generation to generation, cherished by our descendants, and which will not fade until the last night has closed in upon this earthly sphere.

My first find after landing was a handsome set of four eggs incubation fresh.

When we reached the high ground we separated, Mr. Worthington and Mr. Sargent taking the north side of the island, while I took the south side. I walked up the beach keeping a sharp lookout for the eggs as they are very hard to see, being laid on the pebbly beach which they strongly resemble. I found several sets of three eggs, some of two and a few of one egg each. I was gradually drawing near the rocks which I mentioned in the fore part of this article, when glancing down I beheld another set of four eggs. Just think, inside of fifteen minutes I found two sets of four eggs each, while it took Mr. Worthington twelve years to find two sets of the same number of eggs. "Truly I was in luck."

After reaching the rocks I crossed the island and joined the rest of the party; they had also found two sets of four eggs each, Mr. Worthington one set and Mr. Sargent the other.

We continued on around the island, Mr. Sargent and myself going around twice, Mr. Worthington only once.

The nests were slight depressions in the sand and were surrounded by a few pieces of stems, of beach-grass. The nests were mostly placed on the beach above high water mark, some were on the sand, and others on flat rocks on the top of the island; when on the rocks they were usually made of dried grass. Some of the nests were placed behind piles of drift-wood. I found one nest made completely of seaweed, which contained three unusually dark eggs.

The usual number of eggs was two or three. They varied greatly in coloration, some being dark brown or deep olive, while others were pale olive or gray. They were spotted and blotched with spots of dark brown, black and lavender.

The eggs, I think, can be easily distinguished from those of the Roseate Tern. The eggs of Wilson's Tern being marked with large spots and blotches, while those of the Roseate Tern are marked with fine dots and lines.

Incubation was fresh in nearly all cases.

In Mr. Worthington's set of four eggs, two females undoubtedly laid in the same nest, as two of the eggs were of one color, and the other two of an entirely different color. Mr. Worthington is of my opinion that his set was deposited by two females. But in my set the four eggs were alike and seem to show that only one female laid in the nest.

Bank Swallows also breed on Gull Island and a few Savannah Sparrows nest there each season.

I would like to give my readers an account of our journey home as we had a number of adventures and did not reach there until the next morning, but space is limited and I fear I have far out-stepped the limits already.

ROBERT C. WOODHOUSE,
New York City.

Report of the Third Annual Meeting of the N. O. A.

The Northwestern Ornithological Association held its third annual meeting at Salem, Oregon, on the 29th and 30th of December, 1896. The meeting was a success in every respect, members being present from all parts of the state. Rounding off the work of the closing year, reading and the discussion of the numerous reports and papers, and starting the work for the coming year on a solid, systematic basis was a task of such proportions that almost continuous session was required for its completion.

As it was desired to make the meetings interesting to the general public, arrangements were made by the program committee to have the sessions held in the Auditorium of the Willamette University. This being a large, well lighted hall, the collections were shown to excellent advantage.

George D. Peck of Salem, had a large part of his extensive collection of birds artistically mounted which increased the interest taken in the meetings by the public. The most satisfactory feature of this beautiful exhibit, to students at least, was the large series of the eastern and western varieties of the same species. Those of us who are struggling with that intricate taxonomical science of dividing and subdividing, with which the A. O. U. has burdened us, can easily appreciate the value of such a collection. Mr. Peck's extended knowledge of the birds on both sides of the Rockies was of much assistance to the students in their comparative study of plumage variation.

One of the most complete and interesting collections of Oregon bird's eggs that has ever been gathered into one display, it was the good fortune of the society to exhibit on this occasion. Its completeness was accomplished only by the active and enthusiastic co-opera-

tion of the members; each one bringing with him, or sending by mail, if unable personally to attend, his rarer sets and nests.

An open session was arranged for the evening of the 29th, the program containing essays written with a view of interesting the general public in our science. Until half-past eight those present were pleasantly occupied in examining and studying the collections which were explained and described by the [members]. Then our president, William L. Finley, called the meeting to order and welcomed those present with a polished address in which he gave a brief history of the society and the work it has accomplished since its organization in 1894. He then dwelt at length on the future before the society and the unequalled opportunities to advance the science of Ornithology which this association possesses. The mercenary ends and methods of the average pseudo ornithologist he strongly condemned, especially, the wholesale exchanging and buying of eggs, which practice has increased so alarmingly during the past decade.

In the absence of the author, D. Franklin Weeks read an interesting paper on "A Trip through Eastern and Southern Oregon," by Guy Q. Stryker.

Ellis F. Hadley followed by a paper on "The Red-breasted Nuthatch." His description of its nesting habits interesting everyone.

Master James Mott varied the program by a unique recitation entitled "The Owl Critic."

The experiences of a naturalist in a day's ramble were delightfully described by Herman T. Bohlman in his "Incidents of a Day's Collecting among Aquatic Birds."

The "Notes on the Pileolated Warbler," by Hervey M. Hoskins, showed this observer's thorough knowledge of a rare Warbler.

The session closed with an essay by

Darsie C. Bard, entitled "Biographical Sketches of Great Ornithologists," in which he gave some interesting notes from the lives of Buffon, White, and Macgillivry.

Work began the next morning at 8:30 and with an hour at noon and in the evening, for rest and refreshments, the president did not rap his gavel for dismissal until the night had spent itself by half.

The entire morning was devoted to a most interesting lecture by George D. Peck on Taxidermy. He supplemented his remarks by practical illustrations in the art of skinning birds and mounting them. The value of such a lesson from one so experienced is inestimable to students who, as a rule, have access only to written descriptions.

Wednesday afternoon was devoted to the business. After hearing the reports from officers and standing committee, the club proceeded to plan the work for the coming year. A field work committee was appointed whose duties were classed as follows: (a) to revise and complete the association's check list of Oregon birds. (b) to superintend the preparation of migration co-operation with other ornithological associations. (c) to direct the field of the society and to organize collecting expeditions among its members.

The committee for 1897 is: Secretary of the Association, chairman (Present incumbent of Portland, Oregon) Robert W. Haines, Baker City, Oregon. Fred H. Andrus, Elkton, Oregon. Guy Stryker, Milwaukee, Oregon, Elias F. Hadley, Dayton, Oregon. The committee is well distributed geographically while its efficiency is beyond question.

The 1897 Literary and Museum committee is made up as follows: Herman T. Bohlman, of Portland, chairman; A. B. Averill, of Portland; George D. Peck, of Salem. This committee has a heavy share of responsibility, as the proper classification of specimens sent it for

identification is only one branch of its manifold labors.

The membership committee appointments were: Arthur L. Pope, of Salem, chairman. D. Franklin Weeks of Portland. Hervey M. Hoskins, of Newberg, Oregon. The committee has been especially instructed to employ due discretion and select only active conscientious workers. Quality and not numbers is their watch-word. The dues have been placed so low that they have no fear of not being able to enlist all the active students of bird life in the Northwest.

The society intends that no unscientific or untruthful statements shall emanate from it. To preserve this high standard an editor was appointed to supervise all reports and papers which are published by the association in its official organ. Of course, for anything published independently by a member of the club, it cannot hold itself responsible. Our former secretary, Arthur L. Pope, was appointed to this responsible position.

The English Sparrow pest has not a very strong hold in this state, not having, as yet, been reported outside of Portland. In this city there may be, at present, in the neighborhood of *five hundred*. Active measures here will at least suppress if not exterminate them. To carry on this work a special committee was appointed composed of: C. F. Pfleger of Portland. W. L. Finley of Portland. Through the agency of the press, they are to arouse public opinion against the pest. This is, in reality, the only lawful way to go about exterminating them. If the owners of the dwellings and business blocks, in and around which they breed, could be enlisted in this work, their total destruction would be but a matter of a few years.

The election of officers for the ensuing year resulted as follows: President, William L. Finley, of Portland; first

vice-president, Elias F. Hadley, of Dayton; second vice-president, Herman T. Bohlman, of Portland; secretary, Darsie C. Bard, of Portland; treasurer, D. Franklin Weeks, of Portland.

The business having been completed the rest of the afternoon was devoted to reading the remaining essays. A paper by Rey Stryker on "The Audubon's Warbler" was enthusiastically received by the society after their long task of legislating. Darsie C. Bard followed with a paper on "Some Methods of Keeping Ornithological Records."

The final session was called to order by the president at 7:45 p. m. Up to now the society had not taken the time for any thorough study of the collections. So, with the general consent the remaining business was hastily dispatched, and, taking our manuals spent the rest of the evening in studying and discussing the collection. This was, undoubtedly, the most enjoyable and instructive part of the whole meeting.

At 11:30 the third annual meeting of the Northwestern Ornithological Association came to an end. That we were all loath to leave expresses it tamely; let it suffice to say, however, that the meeting was a success in every respect, and that we each, one and all, parted, feeling that we had been benefited by this annual union and that our share of the work for the coming year would be carried out to the best of our ability.

Owing to illness Sec. Arthur L. Pope was unable to attend the meeting. It is hoped that before long his health may be regained.

The fourth annual will be held in Portland.—*Darsie C. Bard, Secretary, N. O. A. in The Oregon Naturalist.*

Mockingbirds and Gnatcatchers.

The most common bird in this section of the country is perhaps the Mockingbird. They remain the year through and begin nesting about the last of

March or first of April. The earliest nest I have recorded is dated March 28th containing four fresh eggs and situated in a cedar tree about seven or eight feet up.

The nest is composed of grass and a downy weed which is very abundant about here and is always, so far as I have been able to ascertain, lined on the outside with a thick mass of thorny twigs.

The birds seem to prefer the cedar trees to any other situation, as at least three-fourths of the nests found by myself were placed in cedars.

Our yard contains a great many of these trees and is truly a Mockingbird "Rookery." I have found as many as thirty nests of this bird within a radius of fifty yards of our house; the greater number of which contained four eggs each and only one contained five, none except incomplete sets contained less than four.

I have found only one set of "runt" eggs, this was placed in a myrtle tree about ten steps from the public road and about forty yards from the house. The eggs were almost exactly the size of a Long-billed Marsh Wren's and were perfectly fresh, the bird being on the nest when I discovered it.

The Mockingbird rears two broods in a season as I have found fresh eggs as early as March 28, as before stated and as late as July 29. I have also noticed young birds just beginning to fly as late as August 7th.

This bird is often caged as it sings very well when in captivity.

In the early summer of 1893 a tree containing a nest of four half fledged young "mockers" was blown down in a storm; the young birds were found in a pool of water almost drowned but I took them and placed them one in each of four other nests in the yard, where they recovered and grew to be fine birds under a foster-mother's care.

The Blue-gray Gnatcatcher is also

quite common about here and begins nesting about the first of May and on until the middle of July.

The nest is nearly always placed in a peach or apple tree, although I have found them in Osage orange trees. The usual number of eggs is five sometimes six and often only four.

The Cowbird often deposits one and sometimes two eggs in the nest of this bird in which case the Gnatcatcher's eggs are invariably broken or cracked. I have often seen these birds build their nest until about half completed and then pull it to pieces and start another in another place.

If the nest is disturbed they will use the old material in the construction of a new nest often in the same tree.

I should like to hear more concerning this species from some one else in Louisiana.

E. HARDING,
Shreveport, La.

Oologist's Association News.

During the past month the following oölogists were elected to membership in the association: J. Parker Norris and J. Parker Norris, Jr., Philadelphia, Pa.; A. H. Frost and R. C. Woodhouse, New York City, N. Y.; Wm. A. Davidson, Detroit, Mich.; Jno. W. Daniels, Jr., Lynchburg Va.

On account of their departure for Alaska, Vice President E. A. McIlhenny, and Sec.-Treas., W. E. Snyder, have resigned. O. W. Knight, Bangor, Maine, has been appointed Vice President and Dr. Guy C. Rich, Sioux City, Iowa, has been appointed Secretary-Treasurer.

J. A. Dickinson, Gresham, Neb., has charge of the work for the year and desires to receive copies of all notes and observations upon the order "Raptores." Give full datas regarding building, habits, food, nests and eggs of

all species and varieties found in your locality. Full credit will be given to all sending notes and *every observer* is earnestly requested to coöperate with the association in this matter. *All notes are welcome.*

Any oölogist desiring to obtain a copy of Bulletin No. 1 of the association which contains constitution of the association, membership list, scheme of work for 1897 and blank application for membership, can procure same by sending stamp to Dr. Guy C. Rich (Sec'y-Treas.), Toy Bldg., Sioux City, Iowa.

ISADOR S. TROSTLER, Pres.,
Omaha, Neb.

A Nest Within a Nest.

It was my good fortune to run foul of a most peculiar nest of the House Wren last summer. Thinking it might interest you I send you the facts.

The nest was made in a Baltimore Oriole's nest. From about two inches from the bottom of the nest the Wrens had filled up the cavity with the material used by them, leaving a hole through the center to get out of. The two inches they did not fill up they lined very heavily with feathers, so thickly that I could feel but one of the five eggs the nest contained. I know the Wren builds most any place, but I think this is by far the most peculiar that I have ever heard of.

J. B. CANFIELD,
Bridgeport, Ct.

A Substitute for Climbers.

A fairly good substitute for the regular climbers is to get two pieces of strong iron in the shape of isoseles triangles. Have three holes made at the base and through these screw them to the heels of an old pair of shoes. These are quite serviceable for a man of light weight.

O. C. PRATT.

THE OÖLOGIST.

A Monthly Magazine Devoted to

OÖLOGY AND ORNITHOLOGY.

FRANK H. LATTIN, Editor and Publisher,
ALBION, N. Y.

Correspondence and items of interest to the student of Birds, their Nests and Eggs, solicited from all.

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FRANK H. LATTIN,
Albion, Orleans Co., N. Y.

ENTERED AT THE POST OFFICE AT ALBION, N. Y., AS SECOND-CLASS MATTER

Sunday in the Woods.

It is rare to hear of voluntary contributions concerning the trips in field or forest made on Sunday. Yet I think—in fact I know—that thousands of the collectors of our land devote the better part of the best day of the week, during the season, to field work.

This was so with me in my active season of youthful enthusiasm, and I only wish that I might always be privileged to continue in the capacity of a

Sunday observer in the woods. And I most sincerely pity the man or woman who can protest against my liberal course of thought.

There are thousands of observers who only find time to enter the portals of their beloved realm on the sabbath; and to these, if they are constituted as I am, a sermon from the trees, birds and flowers touches a far more responsive chord than can be thrilled by the pulpit preaching of

"a loud asserting dogmatist."

We all have our religious sentiments, and our honest convictions are the outcome of the reasoning powers with which God has endowed us. All true naturalists of are bound to become thoughtful, and will surely come to have convictions concerning religion.

In this connection I cannot refrain from offering a suggestion to critical, as well as liberal readers. It is this: if you do go into the woods and fields on Sunday, do so reverentially and with the same spirit which you should possess in entering church for divine service. Do not desecrate the day. It is better not to make a business of collecting, or to be governed by the deplorable greed so lamentably common with many young collectors. Spend your time with your note book in your hand, and with your eyes and ears open for observations. Take your pew seat on some fallen tree trunk, and then in the groves—"God's first temples," commune with your surroundings. Your notes are as soulful, as thoughtful, as loving as the marginal comments in your bible could be. You are the one who is

"Slave to no sect, who takes no private road,
But looks through nature up to nature's God."

Several years ago the following lines were written on the pleasing subject of 'Sunday in the Woods,' and I trust that the readers will not be too critical as to my style. As to the sentiment expressed, I am satisfied that many will agree with me.

"The groves were God's first temples"—truly said.

And kindly felt by many worthy poor;
They of thought sublime and good intent,
Oft kept by social want from sainted door.
The door which opens, but to golden keys
Of wealth and standing in society,
Nor cares for aught but the increasing fees
Which blazon pious notoriety.

The woods, wherein we walk with blithesome tread;

Each flower a lecture breathes; each song is given
By feathered dwellers of the woodland glade
In grandest, deepest hymnal praise to heav'n.

Where thrilling inspirations deeply sown
From intercourse with Nature's magic forms;
Linked with our being; to our fancies grown,
Our loved surroundings have their many charms.

The trees are emblems to us of our life;
In every sphere our aim is to expand.
Our lives are but mending terms of strife
With one 'divine intent,' as nobly planned.
The birds, forever sacred in our breast—
Emblematic of love and friendship dear:
A panacea to that grave unrest
We feel when carpings enemies are near.

We would not scare the well-dressed pious fool
Or knave, who loudly enters with the throng
The so-called house of God, vain-glorious man,
To help his bought salvation cause along.
Nay; rather would we take him by the hand
And walk him forth through woods and pastures green:
Where the Creator's works in our fair land
In never ending beauty may be seen.

Then with respect: in accents born of praise
To noble forests rearing high their boughs—
We'd tell him, "here our temple now we raise;
The roof of green the highest power bestows."
And if he joined that great and growing school
Of nature, old as time, yet ever new;
Where one's not governed by set church's rule,
A convert we would have both firm and true.

MORRIS GIBBS.

The Egg Collector.

When I was young my father gave me a quasi-scientific book, written after the style of a story, entitled "Tommy Try and What He Did in Science." I read and reread this book with great interest, for I was somewhat of a young scientist myself, although my taste

tended chiefly toward chemistry and physics.

Tommy was a fair specimen of the amateur naturalist of today. He was "everything by starts and nothing long." His experiences, as narrated, cover a wide field of plant collecting, boat building, chemistry, conchology, and bird and egg collecting. The average school boy has doubtless repeated Tommy's exertions in the egg line. Tommy had sixty-five eggs, which he kept in a pine box with a glass cover, and, as he thought, they looked very pretty when nested in white cotton. To my mind, however, they would have looked much prettier in their original nests. A friend gave him so many more eggs that he had to keep them in a washstand drawer, and one day, as he was bringing them down stairs, he tripped, and the drawer, eggs and all, went over the banister, only three or four eggs surviving the shock. This discouraged him for some time; but, unfortunately for the birds, he recovered his courage, and he was still collecting at the end of the book and his sixteenth year.

In my own school days, egg collecting was one of the prevailing fads, and on Saturdays parties of boys, sometimes but not always accompanied by a natural history instructor, used to go out into the surrounding country and hunt birds nests. Their trips extended from one or two to twenty miles from the city, and as number counted full as much as rarity, the more domestic birds—I mean those which are less fearful of man and build by choice near houses or in open places where they are easily accessible to prying eyes and hands—these birds suffered most. There were few boys who had not dozens of Robins' eggs, while the eggs of crows and the like were remarkable for their absence. The fad lasted for a month or so. Eggs were carried around in collar boxes and cigar boxes, or even strung on strings,

exchanges constantly being made; but presently some new whim supervened, and the eggs which had not met the fate of Tommy's collection were dumped into the ash barrel.

As the spring days open, thousands of would-be naturalists will begin their annual search for birds' eggs. They will do it as many of them collect stamps—just to see how many they can get. They will not aid science in any way; they will add no new or rare specimens to local museums; they will simply destroy millions of birds without a thought of anything but a transitory pleasure in getting them.

* * * * *

Possibly one out of the thousands is a born naturalist and may become renowned. But one of the first lessons of a naturalist should be economy of animal life. A true naturalist does not slaughter animals promiscuously; he is the first to cry out against wanton waste of life. He does not empty a nest unless of an extremely rare bird, and not always then. He does not take the eggs of common birds at all, and when he does take one he is careful to preserve it against breakage. It is carefully blown, and if there is an embryo it is carefully cleaned, dried, and stored away beyond danger of breakage.

* * * * *

Charles Everett Warren, M. D., in "Our Animal Friends"

The Individuality of the Redtail.

Several times I have noticed articles mentioning the similarity of certain eggs, showing that eggs similar in size, shape or markings are produced by the same birds year after year.

Red-tailed Hawks remain mated all the year round and below I record two instances where the sets of eggs laid by the same pair of Hawks are marked in the same way.

On the 10th of April, 1896 I took a set of two fresh eggs of the Red-tail from a nest in a basswood tree 60 feet from the ground. This set was marked over the entire surface with very distinct splash of brown.

Again on the 26th of March, 1897, I took another fresh set of two from this same nest. The markings on these eggs correspond almost exactly to those of the set of '96.

A friend of mine took a set of two fresh eggs of the Red-tail from a nest in a poplar tree 30 feet from the ground, April 24, 1896. One of the eggs is very slightly lined with brown the other is unspotted. Thirty days later a second set of three was taken from the same nest, laid by the same pair of Hawks. These were all unspotted.

This year the same pair of birds built a nest about half a mile from their nest of last year, from which I took a set of three eggs on the 17th of April. Two of these are unspotted, the other is slightly spotted with brown.

R. W. HEGNER,
Decorah, Iowa.

Nature-Study for Public Schools.

Nature-study, or seeing familiar things in a new light, is a valuable factor in education. How many people can explain, so that a child can understand, why water puts out fire, why some young squash plants bring their shells out of the ground on their backs and others do not; or show the difference between a leaf-bud and a fruit-bud of the apple; or tell from whence all the house flies come? The world is full of such common things, about which people do not inquire. Yet, such subjects can be made very interesting to children and they can be taken up in the schools, not as an added recitation, but as a rest exercise once or twice each week to relieve the monotony of the school room and later be made the theme for a language exercise. Here

are two important faculties that may be brought into exercises—accurate observation and the power of expressing definitely what is seen.

The College of Agriculture of Cornell University, has, under the Nixon or Agricultural Extension bill, undertaken to assist, free of expense, all teachers who wish to introduce this work into their schools. All parents and teachers of New York state, interested in this work are asked to send their address for more detailed information to:

CHIEF CLERK, COLLEGE OF AGRICULTURE, Ithaca, N. Y.

Carolina Wren in Western New York in Winter.

On March 25, 1895 I was shown the skin of a large Wren shot by Alfred Garrett of this place about Dec. 22, 1894. I at once pronounced it *Thryothorus ludovicianus*, but could hardly believe that it was taken here at that time of the year. I have carefully investigated the case and find the facts to be as follows: The bird was shot at a saw mill about four miles north of Batavia, Genesee Co., N. Y. Mr. Garrett says that the owner of the mill had been feeding the bird regularly, which perhaps accounts for its staying so late. He says that it was singing finely when he first saw it and did not seem to act like a migrating bird. I cannot find the species on any list of the birds of Western New York, even as a summer resident, and think this is very unusual.

E. H. SHORT,
Gaines, N. Y.

A Little Short.

E. H. Snort has recently secured a very fine specimen. Those who have seen it pronounce it perfect, although some do say it is a little Short. 'Tis strange Ernest makes no mention of it in his "Exchange EXTRAORDINARY" this month.

Cape May Warbler.

My rarest for '94 was a set of 1-4 Cape May Warbler, a very rare breeder in this locality. The nest was placed in a small fir tree, 3 feet up and 18 inches from the trunk on a shady slope of a hill covered with a dense growth of small trees and bushes. The nest proper was made almost wholly of very fine dry spruce twigs, somewhat loosely constructed, with a lining of horse hair. Eggs have a somewhat creamy ground color, blotched about the larger end with burnt umber and lilac. Incubation begun. Parent birds quite tame. The first set taken about here for many years.

A. L. BLANCHARD,
North Yarmouth, Me.

A Novel Egg Blower.

I always take great pleasure in learning some new contrivance in the oological line to lessen the labor of the enthusiastic collector and having quite a wind saving contrivance I will let my brother collectors know of it. This wind saver is Gas. There is gas in our house and when I want to blow an egg I hitch a small hose onto the jet and the other end I have attached to the blowpipe. Drill the hole in the egg, then put the blowpipe in position, turn on a little gas and out comes the contents of Mr. Egg. JAY G. SMITH.

A Couple of Dogs.

In response to your call for contrivances of aid to oölogists I wish to say I find a couple of dogs, one English setter and one pointer that I have, of excellent service in locating nests of the ground builders, having found with their aid in the last few years a great many valuable sets, such as Short-eared Owl, Marsh Hawk, Prairie Chicken, Quail, Woodcock, Meadowlark and others to numerous to mention.

J. H. BROWN.

My Transient Captive.

One warm, sunshiny day in the early summer of several years ago I lay dreamily in our hammock and watched the slight quivering of the leaves overhead and the high piles of white clouds as they floated across the blue sky with a movement scarcely perceptible. Everything was so quiet I believe I would have fallen asleep in a few minutes more had not a slight, hnmming noise aroused me from my languor. A Ruby-throated Hummingbird (*Trochilus columbris*) had flown directly over me, and several yards distant was hovering over the flowers of a bugle vine (*Ajuga reptans*), as it clambered up the side of the house. Glad of a pleasant diversion I watched its rapid evolutions around the vine, as, disappointed in some bugles, it instantly withdrew and flew to others. I noticed the chalices of the bugles were so deep that to reach the coveted sweets it was compelled to insert its beak so far that its eyes and sides of its head were completely covered by the projecting petals. The recurrence of this fact together with its seeming unconsciousness of my presence suggested the possibility of its capture. I waited an instant till it had again dived into the recess of a bugle; then springing from the hammock I ran to the vines as noiselessly as possible and threw my handkerchief softly over it.

The little creature did not struggle as I removed the cover and held it in my hand. Without evincing the least alarm it peered at me with its little bead-like eyes, and seemed to be wondering whether I was an enemy or friend. I was quite a boy then and proud of my success I ran into the house and showed it to my father, mother and sisters. Its diminutive size and brilliant plumage elicited great admiration and a still deeper sympathy was raised on account of its gentle

manners and the quiet indifference with which it submitted to our caresses.

After these had continued for some time my father, who always regarded the caging of birds as cruelty, told me that as it had afforded a good deal of amusement, I must repay it by the release of the little captive. With boyish reluctance I began to offer some protests and entreating remonstrances but they were stopped; and after a short sermon on the rights of liberty which belongs to every creature and, probably, not a little sternness intermixed, I obeyed. I took it within sight of its place of capture and released it. As I did so I noticed a second hummingbird flying around the bugles. My little captive saw it also, and evidently regarding it as an intruder, darted after it with a sharp chirping note. The intruder hastily retreated with the other in full pursuit. I watched them intently. After a short chase my freed captive returned, hovered again over the vines and then perched upon one of its slender stems. I approached it, and to my surprise it allowed me to take it into my hand, offering no resistance except uttering a soft note and sidling movement. Could it, I thought, have been tamed so easily and so soon?

I carried it once more to the house, and after my relation of the little incident I was permitted to retain my docile pet upon the condition that it was to be confined in no cage but a room seldom used and that if it should ever seem dissatisfied and pine for its freedom I was to grant it.

This was pleasant news. I took it to the room mentioned, and freed it. It circled around several times, and passing by a mirror perceived its image. Thinking the latter another bird, it poised before the glass, and, pecking at times upon its surface seemed trying to get at its own mistaken likeness. I made a small perch and placed it before the mirror and the bird became

strongly attached to it. The puzzled little Ruby-throat would sit upon it often for an hour, and contemplate its companion that mimicked it in everything; and I think the mystery was never solved, for the mirror never lost its attraction.

Strange to say we never gave it any particular name; but without that usual maker of familiarity, it was ever adept in understanding our wishes, and also in obeying them. I was told that, when provoked, Hummingbirds often fell into a great rage, and that if mine should ever show traces of such, I was to be very careful lest it dart at my eyes. But with all the handlings, teachings, caressings, and sometimes, I fear, slight teasings which it received, its gentle disposition was never moved to anger. If a finger were held up, it would leave its perch, and alight upon it. Often it chose the rim of a hat for its place of alighting; and it was never startled from its seat if the person wearing the hat rose to walk.

For its food we dissolved sugar in water, and poured this into a small number of bugles which were always kept in a vase in its room. At times small insects were given it. Later in the summer when the flowers began to fall, and there were no more bugles, we were forced to offer the sweet solution to our little pet in a spoon; and it readily adopted this new manner of taking its food. It was a pretty sight to see it hovering over the spoon, and sucking in the syrup with its long bill.

Many a pleasant hour did it beguile away, and very pleasant are the memories of those hours. Late one afternoon in the latter part of the summer my Ruby-throat began to show signs of uneasiness. It refused to sit upon its perch and flew continually about the room, and struck itself against the walls and ceilings in a kind of dazed flutter. I remembered the injunction with

which I was allowed to keep it, and taking it into my hand I carried it out of doors, and placed it upon a tree. It remained there a few moments and then darted away. It had grown so familiar with us that I hoped it would return to us the next spring, but we never saw it again.

WILLIAM TURK,
Macon, Mo.

Another Use for Toothpicks.

Several friends have adopted the use of wooden toothpicks to strengthen the neck in making up fresh bird-skins; the method being to wind a shred of cotton upon the stick to the required length and thickness—the balance of course being broken off.

This is pressed firmly into the neck—the wingbones having first been tied together the proper distance from each other.

The advantages claimed are stronger skins, standing rougher usage in the mails, and that exchanges never have occasion to find fault with broken necks in your specimens.

HORACE G. SMITH.

Nesting of the Canvas-back.

The Canvas-back nests in suitable places throughout North Dakota. I examined three nests the past season. They were placed among rushes where the water was from three inches to three feet deep, and similar to Coot's nest in construction with an additional lining of down. Shooting a female Canvas-back as she flies from a nest does not prove the eggs it contains belong to her. Red-head and Ruddy Ducks often deposit their eggs in it before she has the nest completed. The eggs are seven to twelve in number of large size and ashy-green in color.

EDWIN S BRYANT,
Davison, Mich.



Great Year at Chautauqua.

So far as can be judged at this date the original Chautauqua on Chautauqua lake will have a great season in 1897. Concessions in rates have been made by railways which will enable many to attend who have been hitherto debarred by the expense. Early in July and early in August excursions will be run from Chicago and New York, with a round trip rate of \$14 in the former case and \$10 in the latter, with pro rata rates from intermediate points, all tickets good for 30 days. Stop-overs at Chautauqua will be allowed on the return half of tickets to the National Educational association meeting at Milwaukee in July, and on tickets to the Epworth League convention at Toronto early in July, which tickets will be issued at the rate of one fare for the round trip, are good for 30 days and can be obtained at all points in the United States and by any persons desiring to use them for visiting Chautauqua. One feature of the rate granted for the cheap 30-day excursions from New York and Chicago to Chautauqua that is new, is the pro rata rates that will be made from intermediate points. This will enable people all along the trunk lines between New York and Chautauqua, and Chicago and Chautauqua, to get to the assembly grounds for

a stay of 30 days at exceedingly low rates. These excursions will be run, one from New York and one from Chicago, early in July and one from each place early in August.

FREE STATE SUMMER SCHOOL.

In 1896, under the auspices of the state of New York, a free summer institute for New York state teachers was held at Chautauqua. Over 250 availed themselves of this course of instruction. An appropriation was made by the state legislature; and through arrangement with the Chautauqua management, all New York state teachers who attended these courses were exempt from the gate fee at Chautauqua during the three weeks' session of the school. A similar appropriation and arrangement has been made for the summer of 1897.

The advantages which Chautauqua offers as a summer resort for health, pleasure, instruction and entertainment are everywhere recognized and with cheap rates and the 30-day privilege the attendance during the season of '97 is confidently expected to far surpass all previous records.

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I want at once the following eggs in first class sets with data. A. O. U. No's 3, 4, 6, 7, 27, 30, 30a, 32, 54, 58, 59, 63, 70, 74, 77, 80, 125, 126, 132-190, 192-218, 222 to 272, 274 to 310, 320, 325, 327 to 383, 390, 392 to 395, 397 to 409, 416 to 443, 452, 471, 475 to 487, 494, 497, 506, 507, 512, 513, 517, 546, 587, 611, 620, 627, 636 to 651, 654 to 763, 713 to 731, 735, 742, 743a, 746, 751, 766. For any of these I will allow full list rates (Lattin's '96 catalogue) in any of the goods listed hereafter.

Not over 5 sets of species accepted without previous agreement.

By mail postpaid.

Wood Instrument Case.....	\$ 35
Nickel-plated Wire Cutters.....	75
5½ inch Forceps.....	65
Book of tissue paper.....	15
100 large tags.....	35
Spool of fine wire.....	20
Brush for spreading arsenic.....	25
Syringe for rinsing eggs.....	35
Embryo set, engraved handles, 3 sizes hooks.....	1 75
Best 12 in. sliding caliper.....	12 00
Nickel-plated blow-pipe.....	35
Folding Butterfly Net.....	3 00

The following go by express at purchaser's expense:

100 No. 3 trays (green).....	\$ 3 75
Cyanide Can for Killing Insects.....	75
Box of Arsenical Soap, pound.....	1 25
Pound Preservative for Skins.....	45

SHELLS.

By mail postpaid.	
Pair of angel wings.....	1 00
Giant Tusk Shell.....	15
Worm Shell.....	10
Telescope Shell.....	25
Calf Cowry.....	10
Lyux Cowry.....	10
Money Cowry.....	10
Wheel Shell.....	05
Yellow Pea.....	05
Nenettian Pearl Shell.....	05
Zebra Shells.....	04
Lightning Shell.....	04
Sun Shell.....	10
Crown Shell.....	60
10 var. named Snail Shells.....	50
10 var. named Land Shells.....	50
5 var. named Agate Shells.....	50
Leader Shell Collection 61 var., all labelled.....	4 75

MINERALS.

Mexican Onyx.....	\$ 20
Flexible Sand Stone.....	15
Electric Stone.....	10
Catlinite.....	15
Coquina.....	15
Chaledony in Zinc.....	50
Geyserite.....	15
Collection of 50 var., labelled.....	3 50

FOSSILS.

Shark Tooth.....	\$ 10
Trilobite.....	60
Fossil Screw.....	25
Sea Urchin.....	25
Fossil Leaf.....	60
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15 var. labelled fossils.....	3 00

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Red-winged Blackbird.....	* 30
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Set of 3 American Herring Gull.....	85
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Egg of Skate.....	10
Egg of Nurse Shark.....	60
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Egg of Musk Turtle.....	20
Yellow Coral (small).....	05
Pink "	10
Spike " (large).....	30
Nest of Humming Bird.....	35
Indian Wampum, 6 for.....	30
Serpent Starfish (damaged).....	41
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Resurrection Plant.....	20
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Mexican Iridescent Pottery.....	25
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1 Celt.....	1 00
1 Spear Head.....	20
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Bunch of Serpindus Berries, ornamental, will last forever.....	15
A number of <i>Ants</i> and <i>Antologists</i> , etc.....	20
Short's "Birds of Western New York".....	20
Lattin's "Standard Catalogue of North American Birds Eggs".....	30
Maynard's "Eggs of North American Birds (colored plates)".....	8 00

I can also use any sets not listed above and all singles (except 761, 704, 652, 511b, 495, 498, 412, 560, 616, 619, 316, 51a, 540) at $\frac{1}{2}$ Standard Catalogue rates. If you have any of the rarer sets send me a list and state what you would like for them. Eggs must be strictly first class, sets accompanied by full data and sent postpaid.

For sets of 337, 339, 343, 332, 373, 375, 416, 417, 486, 428 with nest, 429 n^o 430 n^o 2, 360, 674, 204, 7 and 751 with nest 1 will allow 15 per cent more than standard rate. Address,

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Albion, N. Y.

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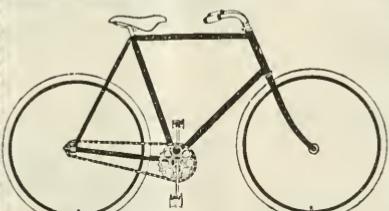
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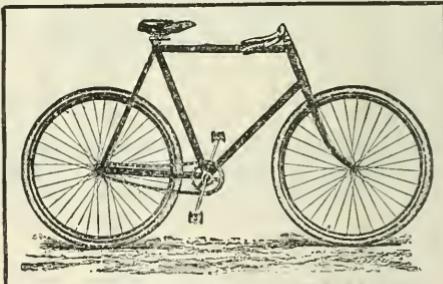
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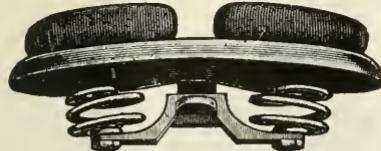
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THE OOLOGIST

have expired, or will expire with this issue. In the future the Publisher requires CASH IN ADVANCE. Hence, if you are one of the delinquent subscribers, your subscription should be forwarded by return mail, if you wish the OÖLOGIST continued to your address.

July issue will go to press promptly on July 15, and be mailed during the following week—all Exchange, advertisements and notes for that issue, must be forwarded by return mail to insure insertion in that issue.

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THE OÖLOGIST.

Monthly.

VOL. XIV. NO. 7.

ALBION, N. Y., JULY, 1897.

WHOLE NO. 134

Wants, Exchanges, and For Sales.

Brief special announcements. "Wants," "Exchanges" "For Sales," inserted in this department for 25c per 25 words. Notices over 25 words, charged at the rate of one-half cent per each additional word. No notice inserted for less than 25c. Terms, cash with order.

Strictly First-class specimens will be accepted in payment at one-third list rates.

What's Your Number?

Examine the number following your name on the wrapper of this month's OÖLOGIST. It denotes when your subscription expired or will expire.

No. 134 your subscription expires with this issue
 135 " " " Aug.,
 140 " " " Jan., 1898.
 145 " " " June,
 150 " " " Nov. "

Intermediate numbers can easily be determined. If we have you credited wrong we wish to rectify.

If your subscription has expired or will expire within a few months you can never renew more advantageously than *at once* in accordance with our offers in May "Premium Supplement." Remember that this offer expires Aug. 10th sharp and will not be repeated. Renewals received since July 17th have been corrected on our books but not on the wrappers.

CASH for vols. Auk 1-3-4 5-6. Also for "Natural Ornithological Bulletin." Eggs from Illinois wanted. Send your lists. W. E. LOUCKS, Peoria, Ill.

Make your own ink. Black, red, green, purple, blue, yellow, white gold and silver inks. A pint of excellent ink made at the cost of 10c. Receipts for all, for eggs worth 50 cents. A. B. ROBERTS, Weymouth, Medina Co., Ohio.

\$100.00 IN CASH is a large sum to tie up in Birds Eggs this season, yet I have a client, a well-known Oologist, who has commissioned me to invest this amount during the next 60 days in A No. 1 sets, series if cheap, with data. Not less than \$5 will be placed in a single lot and all must be very cheap, literally *snaps*. If you wish a slice of the pie send your list and offer and I can assure you that all BARGAINS will receive my careful consideration. FRANK H. LATTIN, Albion, N. Y.

WANTED.—Large singles and desirable sets with data. Can offer nicely prepared sets with data of Southern birds. Choice A 1 sets with data for sale cheap. DR. M. T. CLECKLEY, 457 Greene St., Augusta, Ga.

WANTED:—Collectors to send for my latest bulletins of Skins, Eggs, Shells, Curios, etc., now ready and sent free. I issue the largest bulletins of any dealer in this country. Collectors having 1st class eggs to exchange please drop me a line. JAMES P. BABBITT, Taunton, Mass.

A RARE CHANCE FOR A BEGINNER:—The private Oölogical collection of the late Edward Schenck has been placed in my hands for sale. The collection contains 800 specimens, representing 180 species, in sets with data. Catalogue value about \$140. The collection will not be broken but will be sold at a *Bargain* as a whole. Full particulars and list to parties meaning business. EDW. REINECKE, 500 Main St., Buffalo, N. Y.

FOR SALE:—Fine specimens of Coprolites 25 to 50 cts. each, specimens with one side removed, showing Conularias 25cts. to \$1.00 postpaid. These are fine specimens, every cabinet should contain them. Locality and geological position given with each specimen. G. K. GREENE, 127 West Market St., New Albany, Ind. J3t

I WILL exchange Minerals for Indian Relics, those from Eastern states preferred. ISAAC S. KIRK, Freemont, Chester Co., Pa.

SETS.—510, 591a, 519, 703, 316, 622b, 612, 499, 503, 596, 710, 505a for sets from other localities (data). HARRY DUNN, Fullerton, Orange Co., California.

TYPICAL SINGLES.—Collectors having first-class, *typical* singles for sale cheap for cash, please send lists. Eggs with *data* preferred. All letters answered. Ornithological correspondence solicited. H. S. WARREN, Foot of Wayne Street, Detroit, Mich.

EXCHANGE.—Eggs in sets with data of this locality for other set with datas not in my collection, of same value. EDW. W. SPRINGER, Owatonna, Minn.

I HAVE sets of 488, to exchange for sets of equal rate, or will sell series of same cheap. L. W. BROKAW, Carmel, Ind.

TO EXCHANGE.—For many common sets with data. Stamp Album and two hundred and fifty stamps. Value about seventy five cents. A. E. BIGELOW, Selma, Calif.

WANTED for cash.—A few *heavily marked* sets, with complete, original data, of Broad-winged and Red-shouldered Hawks. JNO. W. DANIEL, JR., Lynchburg, Va.

SETS and singles to exchange for sets. W. H. CONNERY, 404 West New Houston St., Savannah, Georgia.

WANTED.—A good cabinet of about 12 drawers. If you have one write giving price and description. Will pay cash. ARCHIE DAWSON, Mt. Vernon, Iowa.

RED FOXES.—Will sell for \$20.00 cash. Four months old; one pair. Correspondence solicited. Very truly yours, JNO. HUNT STROTH-ER, Welch, W. Va.

SOME fine water spaniel pups to exchange for eggs in sets. Make offers. Parties having Illinois collected eggs for sale, write. W. E. LOUCKS, Peoria, Ill.

I WANT in addition to those listed in June OÖLOGIST the following eggs: Singles of 200, 305, 360, 70, 74, 77, 80, 7, 30, 30a, 32, 475, 477, 428, 429, 423, 751, 735, and will give full list rates for same in any goods listed in "Exchange Extraordinary" in said June OÖLOGIST. All exchange offers will hold good until September 1. I offer in addition to Supplies and Specimens listed in last No. of OÖLOGIST. A number of A 1 Bird Skins in exchange for eggs. List sent for stamp. ERNEST H. SHORT, Albion, N. Y.

A few or those beautiful sets of 675 and 729 still on hand at unprecedented prices. Other scientifically prepared sets dirt cheap. Write quick for list. W. L. & R. D. FOXHALL, Tarboro, N. C.

WHO WANTS a Stetson banjo and case, cost \$30; or 22 cal. Marlin Repeater, cost \$21? What can you offer? CHAS. H. DICKINSON, Grand Rapids, Minn.

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I HAVE the following eggs for exchange: No. 214, 221, 273, 388, all first-class eggs with data. Write soon if you wish to exchange. G. A. ROBERTS, Marathon, Iowa.

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THE OÖLOGIST.

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ALBION, N. Y., JULY, 1897.

WHOLE NO. 134

An Early May Morning in South-western Ohio.

It's often said, "There's no place like home," and that's true if you are a lover of nature, and happen to live near the Little Miami hills.

If you don't believe it please rise at 2:45 o'clock this morning (don't shudder please) and be ready to leave home at 3:00 a. m. All right? All right. Good fellows, you are.

Well, here you are, on time. Already the east is illuminated by a silver light. A Whip-poor-will is singing down in the creek hollow; and a sleepy Martin, from his box, sings "*keer-ko-ra-kittie-kittie-ko*" as we leave. Where are we going? Over here toward the river a mile or so to a picturesque piece of land, covered with woods and thickets and locally known as Hog-back on account of the numerous narrow ridges between the deep ravines.

As we walk along the road in the semi-darkness, no sound is, at first, to be heard, except the song of the Whip-poor-will and the grand concert of the frogs at the pond, where the piping and croaking of the smaller frogs, the *chug, chug, chug*, of the larger ones and the loud *br-r-r-r* of the toads form a medley of sounds that can be heard for half a mile or more.

By 3:15 we hear the first notes of Robins and the "*e-chuckit-zree-e-e*" of the Yellow-winged Sparrow comes over the meadow. It is still almost as dark as ever; but, like the ripening of a peach, the clear green of the eastern sky is changing to a creamy white, and near the horizon, to orange and dull red, while over the river valley lies a mantle of blue fog. The cool night air is fragrant, not so much with the perfume

of flowers, as with the odors of the newly opened leaves, for the trees whose tops a week or two ago were bare and leafless, are now a mass of verdure. The air is heavily laden with the aromatic odors of the forest; which, though dense, still impress the senses as a most delicate and ethereal perfume. The blooming thorn, wild crab, and especially the wild cherry, do contribute a great deal toward scenting the air of the forests; but the most characteristic odor comes from the wealth of virgin foliage and from the moist woodland earth itself.

On the way we have heard several Whip-poor-wills singing in the various ravines and creek hollows of the neighborhood, but here we are at Hog-back, and the Whip-poor-wills are so numerous that it is entirely out of the question to number them; in all directions we hear a continuous clamor of their songs. The fragrant dewy air of twilight seems to vibrate in unison with the notes, as a violin responds to the vibration of the strings and produces a note of greater fullness and beauty.

We'll go a hundred yards or more inside the border of the woodland and sit down for a bit on a stump at the verge of a deep ditch at the bottom of a ravine and listen to the chorus of song. It is ten minutes of four. The whistles, calls and cawing of the Yellow-breasted Chat comes from the thickets near the edge of the woods. The Wood Thrushes, just beginning to sing, utter their notes, clearer than if from silver bells, from the dead limbs of the trees overhanging the ravines. "*Kur-le-ur-ee-e-e*," followed soon after by "*kur-ee-li-kur*," the first with the rising and the second with the falling inflection; is

their song; though no combination of letters can even suggest to one the possible beauty of the song of this woodland artist. At the same time a company of Blue-gray Gnatcatchers begin their conversation of "spah-spah," as they move from twig to twig. A moment later a Whip-poor-will begins singing in some brushwood across the creek, not more than twenty feet distant. Turn the opera glasses over there if you will boys; even if it is light enough to see the log clearly you won't see him. You don't? I thought so.

While he is singing we hear the hum of beetles winging their way through the branches, in the twilight; and the trees, whose tops are wet with the fogs of the morning, begin dropping the distilled moisture upon the dry leaves beneath. Soon after the Whip-poor-will leaves and we hear the broken but loud warble of the Red-eyed Vireo and the rich whistles of the Redbird as additions to the now loud chorus of Chats, Wood Thrushes and Whip-poor-wills. The latter are still singing, though in not so great numbers as a quarter of an hour before.

We will leave the stump and take a flying leap over the brook, landing on a mass of aromatic ferns and clamber up the hill. Here we are on a high and somewhat level point, on which the growth of underbrush is not so heavy. Here are a number of Redstarts, all males, in the tops of the tulip trees, moving from twig to twig, and often uttering their whistling song, "quee quee quee queep!" On an open point of the hilltop we hear a loud, whistling note, the tone of which reminds me of the song of the Rose-breasted Grosbeak, but I'm not sure and the bird does not favor us with a view. In the top of a tall tree near by is a Warbler singing "whee whee whee whee her whee." I don't recognize him. Do you? Hold on! Hear that down in the thicket, there? A sharp "chip," followed by "chip, zree-c-e-e" in loud,

sprightly tones. I'm downright sorry you can't tell me what that is, for I heard it for the first time two years ago a mile south of here. I got a glimpse of the bird in a grape-vine thicket, shot at him, missed, and he's been a "miss" tery ever since. Then I heard several right here last year and never got a glimpse of one. Let's try it again now. Pshaw, he has quit singing already, and that thicket is so dense we will have to wait till he begins again. There is the song again a hundred yards behind us, but before we have gone half that distance it has ceased again. We had better go back to the point of the hill again.

Standing here, where we can see over all the surrounding woodlaud, we see, over a hundred feet below, the creek valley, covered with a dense carpet of blue grass, and diversified with clumps of osage orange round masses of hawthorn and patches of young sycamores; while along the bend of the creek are many old sycamores, whose massive white limbs appear like marble against the dark background. The sun has not yet risen, but it is light enough to see everything distinctly. A horizon of birdsong extends around us, an apparently confused conglomeration of indistinguishable sounds, but after listening a few moments one singer after another is picked out, until we can recognize the songs of all birds previously mentioned, and in addition, the Kentucky Warbler, the Maryland Yellow throat, the Blue-winged Yellow Warbler, the Cuckoo, Tufted Tit, Blue Jay and Crow. A moment later several loud rich notes, followed by "chip-urr, chip-urr," comes from a nearby poplar, and a Scarlet Tanager flies to a large elm, the same one in which the Warbler was heard singing some time before. He is there yet, by the way, and is singing the same song. Hello! it's a Blue-winged Yellow Warbler, but that's a new song. Now he has changed it, it is "whee-whay-chur-chur-

"chee," uttered in the descending scale, with the third and fourth syllables uttered in the same time as one other syllable, and both the same tone. This is a song I have heard before, but it is by no means so common as the drowsy "ra-a a-y-chee-e-e," which can be heard in the vicinity of almost any hillside thicket in April or May.

As soon as the sun appears above the horizon, the chorus of bird-song ceases as if by magic. Two minutes later hardly a voice among the louder singers can be heard. The wiry voices of a few Warblers, the soft whistling of the Blue-wing and the sharp chipping song of another, which begins "chip-e-chip-e-chip," and ends in a medley of sharp similar sounds, are almost the only musical notes to be heard. The cawing of crows and the harsh cries of Jays become more blatant, and seem by contrast to emphasize the silence.

Leaving the hills and starting towards home we pass through a piece of woodland with no underbrush used as a pasture. Here are many Redstarts, the Warbler with the chipping song and a number of Black-throated, Blue and Blackburnian Warblers are visible. Black and White Creepers are abundant, not creeping but moving through the treetops like the Redstarts, often uttering their wiry song. From one of the maples, the favorite tree of the Summer Tanagers, comes the "peter-put peter-put" of that species.

In a small piece of woodland near by almost level and covered with a dense thicket in which the wild crab, gooseberry and grape mingle with blackberries and saplings, we hear a sound, "chip-it chip-it" coming from the dead limb of a beech. Use your opera glasses boys. Connecticuts, are they? I saw my first last year not twenty feet from here. A favorite place it seems. I never heard its note till now.

But it's growing late and judging by the sensations under our vests it's time to go home and get breakfast. So we

walk down the dirt road, where Dickcissels are singing in the little locusts along the fences and the Orchard Orioles are making music in the apple trees and through the village, where the mellow notes of the Baltimore contrast with the chattering of the English Sparrow. Here is the street corner; I go this way. Much obliged to you for your company; will be glad to have you go another time.

FALCO,

Montgomery, Ohio.

Notes on a Few Southern California Birds.

One of the most familiar of our birds is the Arizona Hooded Oriole (*Icterus cucullatus nelsoni*). There is scarcely a country home in Southern California without its clump of Banana Trees or at least one or more Fan Palms and it is in these trees that "*nelsoni*" loves to make his beautiful pensile nest strongly woven from the fibres of the Fan Palm. Davie says this Oriole lays from three to five eggs, but in an examination of more than twenty sets, this season's collecting, I have never found more than three eggs and in four cases only two. On May 1, 1897, I took a nest and three eggs from a banana tree standing in a deserted Chinese vegetable garden. Just one month later I took a second set from the same tree and on the thirtieth of June I might have taken the third set had I been so disposed. This experience brought me to say that the bird will in all probability raise at least three broods in a season if unmolested. The eggs are creamy white, spotted and blotched with brown and purple, varying in shape from those looking at a distance like a typical Cliff Swallow (*Petrochelidon lunifrons*) to those bearing a strong resemblance to the egg of the common Linnet (*Carpodacus mexicanus frontalis*). The measurements of these typical eggs are .85x.60, .95x.66 and

.92x.63 in. These were taken from a pensile nest composed of Fan Palm fibres and suspended from the under side of a leaf of the same tree about eight feet from the ground. The nest was prepared nearly a week before it was occupied.

Two other birds of whom I have seen but little written are the Californian Thrasher (*Harpodynchus redivivus*) and the Sage Thrasher (*Oroscoptes montanus*). The former is a bird of sly, retiring habits, frequenting the scrub oak and thick clumps of nettles, which abound in nearly every canyon or "arroyo" in this section. I have a set of two eggs taken May 15, 1897, from an almost impenetrable clump of nettles. This bird is a very close sitter, often allowing the collector to lift her from the nest.

The set mentioned above consists of two eggs, incubation advanced, which measure respectively 1.25x.76 and 1.27 x.75 in. They are a light pea-green in color, one closely and evenly spotted with clove brown and the other sparsely blotched with cinnamon, especially about the larger end. The nest was very rudely constructed, being scarcely better than that of the Carolina Dove (*Zenaidura macroura*).

About a month before this set was obtained I took a set of four fresh eggs from a similar nest about one hundred feet from the one just described. From this fact I would infer that the last set was a second or third "edition."

About two miles south of this place there is a large "wash" which is covered with sage, greenwood and cactus. Here the Sage Thrasher nests in abundance, breeding in the low sandy sage plants and making its nest almost entirely from small twigs of the white or black sage with a lining of fine grasses and twigs. The eggs of this bird are often confounded with those of the common Mockingbird (*Mimus polyglottus*) and unless the nest is taken or the bird seen it is to some extent very diffi-

cult to differentiate the two species.

My cabinet contains a set of four eggs of this bird taken on May 30, 1897, from a nest in a white sage plant some eighteen inches from the ground. The eggs are greenish blue spotted with cinnamon; average size, .95x.67 inches.

Another of our more common birds is the Road-runner (*Geococcyx californianus*) or Paisano as the Mexicans call it. This is a peculiar bird, very swift of foot and will almost invariably lead its pursuer to the nest. I have a set of five eggs of this species taken April 30, 1897, from a very large nest probably the accumulation of two or three years' nesting in the same place. The nest was placed in a bushy alder tree about four feet from the ground. The eggs bear a slight resemblance, both in shape and color, to those of the eastern Bob-white but are of course somewhat larger and more oval; average 1.55x1.19 in. Two of the eggs in this set were fresh while the other three were in various stages of incubation.

I think that this bird will, when possible, shift her domestic responsibilities to the nest of another bird, for in two instances I have found Road-runner's eggs in the nest of the California Partridge (*Callipepla californica*) and once in the nest of the California Towhee *Pipilo fuscus crissalis*.

HARRY H. DUNN,
Fullerton, Calif.

MAIN GUY OF THE BIG TENT:—I have tried the other papers, but the OÖLOGIST is the main guy of the big tent just as it was when I first took it 11 or 12 years ago.—HARRY B. SARGEANT.

AN AD. THAT PAID—STILL A SUB.:—I saw Mr. Hathaway's exchange in the March number and have bought out his entire collection of minerals, so I concluded to try the same trick with my coins. * * * Years ago when I lived in Essex, Vt. I began to take the YOUNG OÖLOGIST, Vol. I, No. 1.—C. ABBOTT DAVIS, B. S.

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Oologists' Association News.

The Executive Committee adopted the following resolutions (pursuant to the suggestion of the Cooper Ornithological Club of California):

WHEREAS, The death of Major Charles E. Bendire leaves his magnificent ornithological work, "Life Histories of North American Birds," but half completed; and

WHEREAS, The ornithologists of the United States anticipate the probability

that this work will never be completed unless concerted interest be shown. Therefore be it

Resolved, By The Oölogists' Association that this organization express great interest in the completion of the work and most earnestly request that the officers and scientists of the Smithsonian Institution, and other prominent naturalists, do all in their power to further the early completion of this work, by some competent man, who is willing to undertake the responsibility, and be it further

Resolved, That copies of these resolutions be sent to the officers and scientists of the U. S. National Museum and Smithsonian Institution and to the OÖLOGIST for publication.

Members of the Association will please send their vote upon the admission of members as soon as notified of nominations by Sec'y-Treasurer, as everyone is interested in the admission of members.

Application for admission to the Association has been received from J. Warren Jacobs, of Waynesburg, Pa., and is in the hands of the Executive Committee.

ISADOR S. TROSTLER, Pres.,
Omaha, Neb.

Two of My Friends.

As I look from my window there passes before my eyes a flit of yellow and a bit of sharp vivacious song enters my ears.

Ah! now I have a theme.

I step to the window and looking at the hedge a short distance from the house I look at the erratic movements and listen to the garrulous notes of the "Kentucky Mockingbird," otherwise known as the Yellow-breasted Chat (*Icteria virens*).

Oh, splendid bird of the pure air and radiant sunshine can I do thee justice! So light hearted, free and happy. Thy note resounds from the hill tops to the

bottom of the dell; where the sunshines bright and where glides the murmuring stream from its crystal fountain.

Do you wish to learn of him?

Then go out where the "greenfields wait for thee" and the air perfumed by the breath of flowers is made melodious by the birds in their entreaty to induce you to come out where the fragrant breeze brings rest and cools the toil worn brow or by the waters "bickening down the vale," wandering by shade of high rocks, girted with moss, ivy and fern, anon to emerge into fields of flowers reflecting the sunshine from a myriad gems of dazzling beauty. Every turn and bend resounding to the singing waters murmuring in a ceaseless and endless refrain, "men may come and men may go but I go on forever."

Do you seek the home of Mrs. Chat?

Simply found but not so its noisy mistress. Almost any thicket will with careful search reveal at least one of the rough yet cosy structures. Consisting usually of a conglomerated mass of straw, sticks, leaves, grass, newspaper, etc., etc. Compared with the Red Bird's (*Cardinalis cardinalis*) nest it is rather similar; of about the same width but much deeper and as a general rule coarser. Found usually in blackberry brambles or thickets of small saplings.

If you are rude enough to disturb the domain of Mrs. Chat she leaves her home with a noiseless gliding motion which the observer seldom is fortunate enough to see. Flying to a short distance she is met by her husband. Then begins the scoldings, both birds pouring out the fiercest maledictions on the marauder, interspersed with the wildest grief and deep concern. All the while the birds are closely hid and it would puzzle the keenest observer to tell from what direction emanate those wild bursts of song.

If our little friends are in the mood to show themselves we are treated to some marvellous aerial evolutions. The favorite movement is to arise steadily

then with fluttering wings, lowered tail and feet, to drop as if lifeless; all the while chattering in a senseless and noisy fashion. Falling for some distance another idea possesses our hero and with a quick dart and change of song flits rapidly to some leafy retreat, at times darting out in quick, short flights.

In fact the Yellow-breasted Chat is the most erratic and lively of our birds during the mating and nest building season.

The nest is as a rule not higher than seven feet nor lower than three feet and usually between three and four feet. The eggs extremely various both in size and markings. It is a very common thing to find runt eggs in a nest with normal sized ones or large "overgrown" ones with smaller ones. The eggs vary from plain to very beautiful in markings and general finish. The ground is usually of an ivory whiteness with a good luster with variations of greenish and yellowish cast. The markings are almost any shade between brown and red, sometimes black.

A close study of *Icteria* will richly repay you and I would like to say more but space forbids and besides I wish before I close to mention another of our common birds though by no means uninteresting.

Quite different from noisy Chat is the little lithsome Indigo Bird (*Passerina cyanea*). We admire him but in a much different way from *Icteria*. Although the deep blue of Mr. Indigo strikes us as rather gaudy we could not expect that heart thrilling and joyous song to be clothed in less. That voice goes out in praise of its maker.

When we hear that voice out among the beautiful things of nature's fields one can not but be impressed that He made nothing in vain, that
—each moss, each shell, each crawling insect,
Holds a rank, important, in the plan of Him
Who framed this scale of beings;
Holds a rank, which lost, would break the chain
And leave a gap that nature's self would rue."

Mrs. Indigo, although of not so "loud" a color has none the less sweeter voice. Unassuming, in a plain grey gown she sits in content on her treasures while her bright husband sings her praise from the top of some twig or from the telegraph wire, and right well does he champion her.

The little nest below him is a marvel of comfort and beauty. Some call it a rough structure but surely that neatly rounded interior covered with selected leaves, little bits of corn husks, vegetable fibre and the like can not be called unhandsome.

If you like call it rustic, but not rough for rustic it is and that very rusticity is an added grace to its lovely builders. For how well it suits their taste and mode of living. Does it not show to the greatest advantage those delicately pale blue eggs which it shelters? Does it not form the warmest of cosy places for the little children soon to emanate from those delicate shells.

Truly are we blessed with these creatures and surroundings which man calls "Nature;" the abiding place of life, that which no man can or will understand until guided by the Hand in a world more fair and lovely to behold.

OTTO GRADY,
Ludlow, Ky.

A Nest of the Ruby-throated Hummingbird.

It may be of some interest to readers of the OÖLOGIST to listen to a little pleasant experience of mine in regard to the Hummingbird. To some it may recall similar experiences, of which I should be greatly pleased to hear, for I think that the Hummingbird is one of the most interesting types of North American birds. This which I am about to relate happened years ago, but it has remained as fresh in my memory as though it had happened but yesterday, while my experience with

other birds can only be recalled by recurring to the collection then made. It was in this wise:

One mild day, as was my custom, I was strolling absentmindedly through a small wood not far from my home, meditating on its varied beauties; I aroused myself and my latent imagination and listened with delight to the many feathered songsters overhead while a casual glance to the ground revealed the magnificent varieties of the glorious plant kingdom to my enraptured gaze.

Suddenly a whirr and buzz above my head caused me to look aloft, when, lo, less than four feet overhead I beheld a wee little nest, the outside of which was completely covered with lichens so as to be barely distinguishable from the bough of oak to which it was attached and a pretty Hummingbird sitting thereon contentedly, while its mate, whose flight had attracted my attention, described various circles and ellipses, with sundry darts and recessions, seemingly in perfect enjoyment of the fact of its existence.

I stood spell-bound, for this was the first glimpse I had had of this feathered "insect," as it was called by the old conquerors of Mexico, in its home. I may also mention incidentally that the bird is not so very common in this part of the state, therefore my interest was two-fold: first the nest and second the bird itself, which I had never before seen at so close a distance.

One of my first thoughts was that I determined to possess myself of their eggs, provided they were not in a too advanced state of incubation. The nest was not very far above the ground but still too high to be reached without the aid of a ladder, so I was compelled to go home and procure one. This occupied but very little time and when I returned I beheld the unusual spectacle of both birds resting, one on the nest and the other on a neighboring twig. I raised my ladder and ascended to the

nest, but the tiny inmate refused to move. Meanwhile the other bird had commenced to circle around my head and making feints as though it would dash into my face. When I had compelled the occupant of the nest to retire precipitately, I gazed with curious interest into the delicately wrought nest. Its inside was lined with soft, downy matter, pure white, while at the bottom lay the objects of my search, two tiny eggs, whose snowy whiteness was only rivaled by the bed on which they reposed.

Both birds now continued to fly around my head, occasionally settling on a branch, but quickly returning to the wing. I confess, I felt a twinge of conscience, never before experienced, as I prepared to abstract the property of this innocent and harmless little bird, which subsisted entirely from the nectar gathered from near-by flower-gardens and the disagreeable insects that infest the air. However, my oölogical instincts quickly asserted themselves, and forthwith I determined to ascertain the fighting qualities which they would develop in defense of their home. First I made a feint of reaching for the nest, this produced a furious onslaught from the entire forces continuing for about a minute. Next I placed my hand, or rather finger, inside the nest; this brought into full play their desperate courage, both parties dashing toward my head, and fearlessly settling within an inch of my hands, while ever and anon they would return to the wing and circle round about me and the nest, undoubtedly bewailing their sad fate and the untimely end of their prospective progeny, in sorrowful cadence, apparently recognizing the uselessness of further resistance. My heart went out to these poor dumb creatures whose undaunted courage was sufficient to excite admiration in the coldest breast, but my sympathy was not strong enough to cause me to relinquish my purpose and

so I decided to put an end to the matter by taking both eggs and retiring from the field, leaving them, indeed, in possession, but without the spoils.

H. C. SCHWEIKERT.
Bernville, Pa.

Early Nesting of Zenaidura Macroura.

While trimming orchard April 8, 1893, I found a nest of the Mourning Dove, containing two slightly incubated eggs. The nest was composed of dried grass and weed-stems and was built on a horizontal fork of an apple tree ten feet from the ground.

Davie in his "Nests and Eggs of North American Birds," mentions taking the eggs of this bird as early as April 10; but April 8 seems an unusually early date for *macroura* in this locality.

FRANK H. BOTSFORD.
Lyndonville, N. Y.

Nests of Chimney Swift.

A novel scheme for securing the nest of the Chimney Swift is as follows:

Take a common cigar box and on one side nail a strip of tin the exact length of the box and reaching about an inch or so above it. On the other side nail a pole, anywhere from ten to twenty feet in length as the depth of the chimney may require. The box should then be filled with cotton.

Lower the box down below the nest and then pull it up so that the tin edge will sever the nest from the chimney. Carefully pull the box to the top of the chimney and remove the eggs.

F. W. PARKHURST,
Lawrenceville, Pa.

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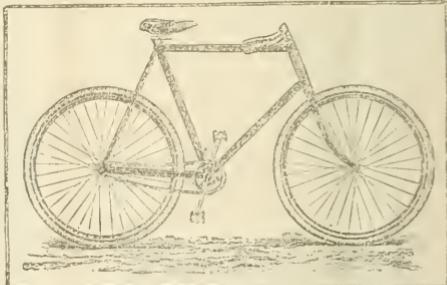
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THE OOLOGIST.

Monthly.

VOL. XIV. NO. 8.

ALBION, N. Y., AUGUST, 1897.

WHOLE NO. 135

Wants, Exchanges, and For Sales.

Brief special announcements, "Wants," "Exchanges" "For Sales," inserted in this department for 25c per 25 words. Notices over 25 words, charged at the rate of one-half cent per each additional word. No notice inserted for less than 25c. Terms, cash with order.

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140 " " " Jan., 1898.
145 " " " June, "
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ALBION, N. Y., AUGUST, 1897.

WHOLE NO. 135

To the Plover.

A few thoughts suggested to an Ornithologist upon being served with Plover at dinner.

BY NEIL F. POSSON, MEDINA, N. Y.

Creature of the upland meadows,
Frequenter of field and fallow,
Poet of the brook and sea shore,
Innocent and lovely Plover,—
Unto you, in admiration,
These weak lines are dedicated.

Pretty, winsome, stylish Plover:
Dignity in every movement;
Grace expressed in every motion,
Whether walking, running, flying;
Thou, thyself, art Grace and Beauty,—
An adornment to the meadows.

And thy innocence and shyness,
Thy confiding, trusting nature,
Are enough to make me love thee,
Simple, faithful, quiet creature.
You'r my friend and I'm your lover.—
Gentle, lisping, whispering Plover.

But alas for man's rough nature!
Seemingly wthout a conscience,
He can hunt thee without pity.
Grace and purity count for nothing,
Innocence and beauty likewise,
When he's bent on going "a-gnunning."

* * * * *

Not of Plover by the seashore
Am I thinking of at present;
Not of Plover in the meadows,
Adding beauty unto Nature
By their life, and grace, and motion;
But of Plovers hunted, slaughtered.

What is this I have before me,
Palatable in appearance,
Well prepared, well cooked and garnished,
Appetizing to the hungry?
"Plover on toast" the menu stated.—
A dainty dish,—and so I ordered.

Ordered Plover for my dinner!
Appetizing to the hungry,—
Yet I leave the dish untasted.
How can I partake of Plover,
Dearest friend of all the meadows,
Trusting creature of the brookside?

From the dish upon the table
None could now determine species,
"Whether *Dominicus* of Killdeer,

Meloda or *Squatarolo*.—

But it matters not the species,—
It's a *Plover* from the meadows.

Appetite is taken from me
At the sight of that trim figure,—
Gentle, unsuspecting creature,
Hunted, slain for man's enjoyment,—
For my thoughts are in the meadows,
In the "open," by the sea shore.

Oh, that man would show more mercy
Towards his friends, the feathered creat-
[ures

Helpless, innocent, and hopeful,
They were made to lift us upward,
Make us better, point us God-ward,—
Let us try to learn to love them.

* * * * *

These the thoughts that came unto me
As I tried to eat my dinner.—
Of the Plover's grace and beauty,
Of his winsome, trusting nature,
Of his charms when in "the open,"
And how sad that man should eat him.

Creature of the upland meadows,
Frequenter of field and fallow,
Poet of the brook and sea shore,
Innocent and lovely Plover,—
Unto you, in admiration,
These weak lines are dedicated.

Boston, Mass.. April 11, 1897.

Bird Skins—A Hint or Two.

In skinning fat birds, keep many pieces of bibulous paper at your elbow, with which to absorb free fat. Leave the fat layers about vent and rump, in small birds, on skin until the skin is turned over the head. Then remove the fat layers with scalpel. Tie together ends of the wing bones, left in,—one-half inch to two inches apart. In poisoning skin, after dredging everywhere thoroughly, including nose-cavity, go again, all around edge of skin. When skin is finished, use a U-shaped half cylinder of tin to mould the skin.

P. B. PEABODY.

The White-rumped Shrike in Chicago Parks.

Our parks, that boon to sweltering humanity of this great hive, are at seasons filled with a varied assortment of avian life. Many are the migrants that stop here by the way both in spring and in fall and some stay with us all summer. Even in winter when old Boreas sends down his chilly blasts and packs the ice against our shore and his companion Jack Frost peeps into every crevice our parks are not devoid of feathered attractions. One of these, perhaps not the most cheerful, yet one of the most interesting ones, is the White-rumped Shrike.

You may find him perched on the very end of the topmost twig of some poplar tree on any bright day. Despite his dull gray and his predatory ways he is often engaged in caroling sweetly. He is an imitator of no mean ability and coming in the midst of winter when bird songs are scarce his musical efforts are extremely welcome. Such noises as the cat-call of the Catbird he reproduces to perfection and at times he gives vent to his own harsh, grating trill. But at other times his voice is subdued and you are in turn reminded of the Robin, the Red-winged Blackbird, and the sweet song of the Catbird interspersed by sweet notes that are his own for ought the writer knows.

These vocal attempts are usually produced by the satisfaction of the cravings of nature produced by a hearty meal of European Sparrow. This latter bird is certainly plentiful enough, and it furnishes the daily fill of fare for the Shrike.

The modus operandi in capturing and disposing of a Sparrow is very interesting. Singling out a victim the Shrike gives chase. The Sparrow screaming with fright flies hard for liberty but is gradually overhauled. I have seen this chase going on high in

the air, and again a Sparrow would try to baffle its pursuer by dodging through a tree. The Sparrow is a plucky bird, but it is no match for its adversary which is not so very much larger. It is finally tired out and the Shrike poising above it dashes down against it with such force as to completely overbalance it and send it fluttering towards the earth, and presently one more "rat of the air" has expired. And now for the meal. The Shrike picks it up first with his strong hooked beak, then arising and flying a few feet tosses it downwards by a lowering of his head and reaching forward with his feet transfers it to his small but apparently not very weak claws. He now carries it to some tree alights on some small limb, one foot on his prey, the other grasping the perch. Selecting some stiff or dead twig he perches just below and with the Sparrow in his beak tosses it over the end and throwing backwards his whole weight tugs away impaling it usually by the loose skin of the neck. These twigs are not too sharp, at least, in the cases I noticed; perhaps he sighs for his native thorn hedge. Often he uses some acute crotch and wedges his victim securely. He now proceeds to peck out the brain of which he seems very fond, he devours the whole head except the beak; this is the only part of the head I have been able to find below. He pulls off the meat in large mouthfuls and except for an occasional beakful of feathers given to the wind swallows everything. The head, neck, and some of the fore part of the body usually suffices for the meal. He seems indifferent to what becomes of the rest.

I had a good opportunity to watch the impaling and wedging process as the Sparrow would frequently drop to the ground; then the Shrike would swoop down in Hawk-like fashion and describing curve near the ground alight near the tid-bit pick it up, always with

his beak as described and arising to some perch and getting it secured resume his repast. My persistent stare would annoy him somewhat and he often changed to another tree on that account. Finally his wants satisfied he would utter his loud, grating trill and retire to some tree top to warble happy and content.

I have observed these proceedings on the part of the White-rumped Shrike during the past two winters. I have tried hard to identify some of them as the Northern Shrike but in no instance have I succeeded; close inspection would reveal the absence of the wavy lines on the breast. There seems to be some conjecture as to the object which Shrike's have in impaling their victims. In the cases I observed the reason could not be in doubt, namely: to assist in tearing its prey. And, although, this may not be the reason in every instance it might be the origin of a habit carried to excess.

JOHN LARSEN.

Three Birds of a Louisiana Marsh.

The whole of the southern coast of Louisiana is a vast sea marsh, from twenty-five to fifty miles in width, threaded with numerous bayous and passes, and dotted here and there with lakes and shallow sloughs and lagoons.

This marsh, or prairie, as it is locally called, is the haunt of countless numbers of wild fowl the year around, in winter the home of Ducks and Coot of the north, in summer the habitation of Herons, Rails and many small birds.

Of the summer residents, three especially interest the student of bird life, the Least Bittern (*Botaurus exilis*) the Purple Gallinule (*Ionornis martinica*) and the Boat-tailed Grackle (*Quiscalus magor*), all of which impress the bird lover by their beauty and their habits.

The first, the Least Bittern, smallest of the Heron family in North America, is a truly interesting bird. Here it is

found on the banks of every marshy bayou and pool of still water, living among the thick reeds and rank grass that clothe with their verdure the treacherous marsh. The agility of this bird in climbing and slipping through this thick growth is remarkable, and it is only when suddenly surprised that it takes wing. Its flight at first is awkward and heron-like, but as it rises over the reeds, its flying becomes steady, and fairly strong and swift. The stupidity and want of fear which this bird at times displays, is another puzzling trait. I have seen one standing on the floating water-cabbages, (a curious aquatic plant which carpets many southern bayous), and not moving until the boat was within a foot or two of it, sometimes not until touched by the oar or the hand of the occupant, when it would take a few jerky, nervous steps, out of reach, or rise and fly to the adjacent bank. The note of the Least Bittern, despite many to the contrary, is a short, peculiar croak, which is difficult to exactly describe, even though one has often heard it.

This Bittern arrives in Louisiana in the latter part of March, and begins nesting shortly after its arrival. The nest is always built near the water, usually from one to four feet from the edge of the reeds, and from twelve to thirty inches up. It is constructed of broken bits of reeds and marsh grass to form a mere platform, perfectly flat and loosely put together. The diameter of the nest averages about seven inches. The depth of material about two or three, while the cavity, which is always very slight, does not exceed half an inch.

Nests with fresh eggs may be found from about the middle of April to the middle of May, and I am inclined to think that a second brood is raised. I took several sets, incubation begun on April 18th, and saw many young on May 6th. A habit of the Bittern which,

I have not seen mentioned, is its fondness for building in the immediate vicinity of the numerous colonies of *Quiscalus major*, two or more nests of the Bittern being invariably found mingled with the more numerous habitations of the Grackles. The Least Bittern shows no parental feelings whatsoever when their nest is disturbed. The female usually slipping away at the approach of danger. In connection with this want of courage, I will cite an incident, a little tragedy of the marsh, which came under my notice last spring. While collecting, I observed a female Bittern sitting on a bent reed, a sharper glance disclosing a nest a few feet away, filled with a writhing, yellow mass. This, still on closer inspection, proved to be two young Bitterns, perhaps five days old. In addition the nest contained an egg, and another young bird, apparently of the same family, was perched on a reed a few feet away. The birds in the nest, though alive, were literally eaten to pieces by large red marsh ants, and were twisting and turning in every direction to rid themselves of their tormentors. I dropped both birds in the water to end their suffering, for the flesh on their wings and legs was completely eaten away.

The bird lays from three to five eggs, four being the average here, pale blue in color, in shape elliptical. The average size of fifteen eggs in my possession is about $1.25 \times .95$.

The next bird mentioned is the Purple Gallinule (*Ionornis martinica*), commonly called the Blue Rale, (from the French settlers name of "Rale Blue" or "Blue Rail). It is nowhere to be found in great numbers, but it is fairly common along the edges of the less frequented bayous. The male bird is tropical in the brilliancy of his coloring, of purple, blue and green, with red frontal plate and yellow legs and beak, it is certainly the handsomest plumaged bird we have. It is more often heard than seen,

as it keeps up a succession of musical toots and clucks, sometimes loud, sometimes low and subdued, varied occasionally with a cackle, something like that of the King Rail, but not as harsh or as shrill. The Purple Gallinule is a good swimmer, and while swimming it moves the head back and forth in a pronounced manner at each stroke of the legs.

The Gallinules begin to nest early in May, and full sets of fresh eggs may be found by the fifteenth, although I have taken sets of six during the first week of the month. The nest is invariably built in a clump of the long, ribbon-like sawgrass, the tops being bent down and weaved together to form a rather insecure platform, which occasionally is lined with a few strips of dead rushes, but often the eggs lie on the green grass of which the nest is composed. The birds build a great many sham nests before settling definitely on a location, and many times is the collector deceived by these numerous blinds, of which four or five are found for every real one. The nests are either over or close to the water, from nine inches to three feet up, though the shams are four or five feet in the air. From five to nine eggs are usually laid, although six or seven is the average. The eggs are very handsome, having a ground of creamy buff with a pinkish tinge, and spots of several shades of brown, interspersed with purplish shell markings. The sizes vary greatly, from 1.65×1.10 to 1.80×1.20 . The smaller eggs are usually much more elliptical than the larger sizes. Among a good many sets collected last spring, is a set of four, three of normal size, the fourth about the size of a robin's egg. This runt egg is very heavily marked, more so than any other I have collected. It is perfectly ovate, and the shell is lumpy and rough, and more or less porous. It is the only one of its kind I have ever seen, though it may be common enough.

The Boat-tailed Grackle (*Quiscalus major*) is a bird worthy of much study. It is a resident and well known here and commonly called the "Choc" (English "Chough") by the Creoles, perhaps from one of its numerous and characteristic notes, or perhaps as a contraction of a word similar to that above. In winter, the Boat-tails are seen around the city in large, noisy flocks, which blacken the ground with their numbers in their favorite pastures. Towards spring these flocks break up and go to some nearby marsh to breed, usually in colonies of from ten to a hundred pair. The male Boat-tail is a very handsome bird, with glossy purple, green and black feathers and clear yellow eyes. And the female is conspicuously plain, being a uniform, rusty, dingy brown. The male has a seeming endless variety of notes, and is without doubt the noisiest bird in the marsh in mating time, keeping up an incessant clatter of call and alarm notes, occasionally swelling his throat to utter a grotesque song to his intended. The colonies are usually found on the banks of some secluded water course, the nests being built of dead grass which has laid in water and mud. This the bird brings wet from the marsh, and shapes it, with the mud clinging to it, into a substantial, though ugly structure, about six inches outside and four inches inside diameter, and about three and a half inches deep inside.

The bird builds in sawgrass, in reeds, in a clump of the hollow cane-like grasses, in short, in any kind of marsh grasses or reed strong enough to support the nest, sometimes between willow saplings, and usually from two to four feet above the level of the water or the ground.

Like all Grackles, *Quiscalus major* is essentially gregarious, and colonies of from twenty-five to fifty pair are most common. In Lake Catouatchie, some twelve miles from this city, I found a

little islet of sawgrass, about eight feet in diameter, and about 150 feet from shore, which contained nine nests of Boat-tail, all with eggs or young, and two nests of the Least Bittern, one with eggs, the other with young.

The Grackle colony chooses a new site each year, usually quite close to the old one. Many double nests are found and some that look as though three nests were built one on the other. Of these the majority are empty, though a few contain eggs. I do not know why the birds build these double nests and think that perhaps a new nest is built on the old one in raising the second brood, as nearly all the nests of this character were old nests.

The birds appear quite solicitous of their young and eggs and usually make a fuss when one approaches the nest. Eggs may be found as early as April 15th, and on May 6th many nests contained young almost fully fledged. The majority of the nests contained three eggs, some only two, and many had a single young. Of several hundred nests examined, not one contained over three eggs, so I conclude that three is the average set here. The eggs in color and markings, look like exaggerated specimens of the eggs of the Baltimore Oriole. In most of them the shell is smooth, with a ground of a bluish tint with spots, lines, blotches and scrawls of various shades of umber and black, most prominent at the larger end, and purplish shell marks of a similar character.

In a few specimens the ground color is a brownish drab, instead of blue. The pigment washes off very easily when the eggs are fresh, so that it is best not to use too much water in blowing. The eggs vary greatly, the average specimen being a long ovate in shape, and in size about 1.18 x .87.

BETA,
New Orleans, La.

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A Monthly Magazine Devoted to

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FRANK H. LATTIN, Editor and Publisher,
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Albion, Orleans Co., N. Y.

ENTERED AT THE POST OFFICE AT ALBION, N. Y., AS SECOND-CLASS MATTER.

Our old friend Posson has the nerve to offer the readers of the Oologist a little "spring poetry" this month, but in a letter to the Editor apologizes, thusly: "One day last spring at the United States Hotel in Boston, I ordered Plover for my Sunday dinner. The bird was brought in nicely roasted—*entire*. Its head bent back, its bill reposing on its breast. I was not cannibal enough to eat my best friends, the birds, and this simple episode inspired me with a bit of poetical weakness, with the enclosed result."

N. L. Davis, of Brockport, N. Y., now collecting in the Jackson Hole, Wyoming district, in a recent letter says: "I am having a grand good time and today I took care of three (3) Grizzly Bear hides, killed yesterday."

P. H. Beck, of Berryessa, Cal., has gone to the Gallopagus Islands to be gone from six to nine months. He has gone on a scientific expedition, sent out by eastern parties. It is expected that the expedition will result in a thorough study of the flora and fauna of the South Sea islands if all is well. They sailed from San Francisco, June 21st, on the schooner, Lila and Mattie, a vessel chartered for the occasion.

Nesting of the Road-runner in Lampasas County, Texas.

Notwithstanding the fact, that I made my acquaintance with the *Geococcyx californianus* some years ago, I took my first observations concerning its nesting habits only three seasons ago. The first nest of this Nancy Hanks defying bird that I ever found was placed on a horizontal branch of a small oak tree about ten feet from the ground. It was not placed in a fork, but simply constructed on the bare surface of the limb. It contained two rotten eggs and four young. I took two of the young and succeeded in raising them to quite a size, but after a time they both died; a fact which I deeply deplored as I intended to study their habits. In a wild state they are exceedingly shy and it is impossible to learn much about their nature and idiosyncracies. They were very tame and would run about the yard like chickens. From observation I find that the principal diet of the Road-runner consists of snails with an occasional small reptile. The soil of this country being decidedly calcareous, snails are abundant. During the summer months the different varieties of

cacti are covered with them. The bird always takes his snail to convenient log and proceeds to crack his shell and extract and devour the pulpy inhabitant. When logs are somewhat isolated, the ground adjacent to them is almost completely covered with fragments of snail shells; evidences of the Road-runner's repast. In Texas this bird is almost universally as the Chaparal Bird or Mexican Peafowl; sometimes it is called the Ground Cuckoo, Snake Killer and Paisano. As a general rule they nest in the highlands, placing their nests in a small oak tree or haw bush near the brink of a hill; seldom on the summit. It is rather a clumsy affair, the chief constituents of which are usually sticks seemingly placed in a careless manner; very flat; a little depressed in the center to receive the complement of eggs; generally 5-6 as wide as the nest of the American Crow. The eggs vary in number from two to twelve though it has never been my fortune to secure more than five. They are of an ovate shape and pure white, a typical specimen measuring 1.50 x 1.17. One peculiarity of this bird is that it leaves so many of its eggs unhatched. Repeatedly, I have found single rotten eggs in forsaken nests. Their breeding dates extend from the latter part of March to July. I intend making more rigid observations this season.

JAMES J. CARROLL,
Lampasas, Texas.

From Maryland.

May 21, 1893, I found a Brown Thrasher sitting on her nest in some brier bushes.

She was very tame, and would not leave the nest until I pulled her tail, and then she merely hopped off and perched about six inches away.

If I had desired to do so, I could easily have caught her in my hand.

I looked in the nest and found a set of three eggs, and after packing them

in my box I went back to get a description of the nest. The bird was on it, and when I scared her off I found another egg.

I took it, supposing I had a set of fresh eggs, but much to my surprise, when I cleaned them I found them all to be badly incubated.

The bird when first flushed from the nest, must have carried one of the eggs between her legs, which would explain her reluctance to move more than a few inches from the nest.

* * * * *

Mr. Wm. Brown's note on a flock of Hummingbirds, in the June, '93 OÖLOGIST, puts me in mind of something of the kind I saw one day in May, 1892.

There is a large Horse Chestnut tree in the next yard to mine, and one morning my attention was drawn to the immense number of "Ruby-throats" that were flying about the blossoms.

I looked for them the next day, but saw nothing more of them.

W.M. H. FISHER,
Baltimore, Md.

A Series of Nests.

When Howard Pitkin, of East Hartford, was harvesting his tobacco last September, he discovered upon a girder in one of his sheds a queer specimen of bird architecture, which seems to be without parallel in ornithology. This was a nest—or rather a series of nests—of the common robin. There were eleven in number, built close together in one row and so interwoven that the whole string could be lifted like a chain. Evidently they were the work of one bird, or one pair of birds, and seemingly were built from center, as the center nest contained the eggs, and the nests at each end were in an unfinished state. The others seem to be perfect in construction, but differ very much from the nests usually built by this bird—the coarse sticks of the foundation and the mud plastering of the inside being ab-

sent. Another peculiarity is that they built of one kind of grass, after the manner of the nests of the orchard oriole; and this grass is so intertwined and woven together that it links the whole series into one piece. The eggs are indisputably robin's, and, indeed, the bird was seen and recognized. At the time the nests were found the eggs were fresh. This was two months later than the time of robin nesting, even of the second laying. The only plausible theory of the motive for constructing such a domicile is that these nests were constructed by a male bird who had just arrived from Salt Lake City.—From an old Hartford Times.

Queer Place for Horned Lark's Nest,

On the 10th of May, '93, while collecting in the foot-hills east of Fountain, Colo., I was attracted by the curious flutterings of a female, Prairie Horned Lark. I watched her unperceived for a few moments, when she suddenly disappeared. Upon search, I found an abandoned Prairie dog's burrow, and failing to find another opening, I decided the bird had gone into the hole. So with a camp axe I chopped and dug into the ground around the hole, when at the depth of $4\frac{1}{2}$ feet I found a nest composed of dried buffalo grass and feathers, containing five eggs of the Prairie Horned Lark—*Otocoris alpestris praticola*—in an advanced state of incubation.

WILL D. WALTMAN,
Colo. Springs, Colo.

Bird Nesting Suggestions.

I have found a strong pole, having a large hook screwed into one end, to be used in drawing the nest of the Baltimore Oriole within reach when it would be inaccessible in any other way. The hook could be carried in the pocket and attached to a sapling in the

woods. Have also used a small mirror attached to a pole ten or fifteen feet long to find out whether nests contained eggs or not thus saving a fruitless climb or locating a coveted "set."

E. J. BOTSFORD,
Medina, N. Y.

The Return of the Birds.

When the spring birds are late, it seems to be the lack of food, rather than the cold that delays them. A cold storm serves to delay migrations, but steady cold does not seem to bother the early birds, if food can be found. Deep snows bring the Snow-bunting southward; cold, alone, does not. In winters when the snow is deepest, Goldfinches are scarcest in the northern states. Let the weather be ever so fine, the Bluebird and Robin will not appear when the earth is buried deep. If they only feared cold they would return during the "warm spells" of winter. An abundance of food, therefore, (at least with us) seems to be the first factor in the return of the birds.

WILLARD N. CLUTE,
Binghamton, N. Y.

Towhee's Nest Off the Ground.

In this region it is not unusual to find Towhee's nests "off the ground." During the seasons of '94 and '95 I saw no less than six situated in small trees from one to four feet from the ground besides several old nests which appeared to have been made by this bird.

E. E. BREWSTER,
Iron Mountain, Mich.

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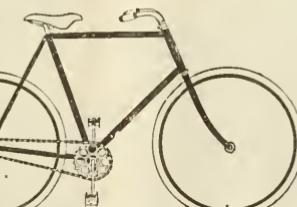
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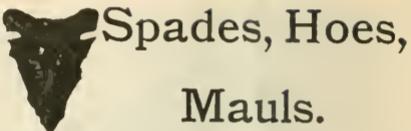
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WHOLE NO. 136

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ALBION, N. Y., SEPTEMBER, 1897.

WHOLE NO. 136.

Nesting Habits of the American Bittern.

All who have collected in marshy sections have often heard the peculiar song of the Bittern in the lowlands. Coming from the morass, the notes seem of mysterious origin and to those of superstitious disposition the weird sounds appeal with a great deal of force. Nevertheless, to the observer, the nature of the love-song is well known and many collectors have carefully noted the movements of the birds when uttering the sounds and studied the notes.

For many years the peculiar habits and movements of the Indian Hen or Greater Bittern have offered special attractions for me and I have carefully noted the nesting and migrating birds in my field book. Thinking to present a few observations of interest, though aware that most observers are familiar with the facts offered, I will take a few notes from my book.

The birds reach the 40th parallel in the spring by March tenth and often earlier. In fact I have seen specimens on boggy ground when the ditches were frozen over and everything looked decidedly wintry. The Bitterns do not arrive during these periods, but like many other mistaken birds attempt the northern trip too early in the season. They will not leave for a spell of cold weather and therefore put in their time disconsolately stalking along the edges of streams, or over the ground kept soft by spring holes.

As soon as the ground is fully thawed out and spring has fairly assumed her pleasing sway, the Indian Hens tune up their lazzoos and proceed to demonstrate that tom-tom, kettle-drum calithumpian melodies are the order of

the day. There is nothing like the peculiar notes, and from their very uniqueness they have a charm for me unsurpassed by any other bird's notes on the marsh.

When the bird sings we look vainly for him, and it is only after prolonged search and a vexatious tramp through the sloughs and across swampy tracts, that we finally definitely locate him. The chances are that the singer was not where we expected to find him, for this bird's notes are very deceiving and often lead one amiss. Then again I have been badly fooled by the notes of two birds on different parts of the marsh.

In due time we see the old fellow stalking through the long, rank marsh grass or perhaps wading in a pool or ditch. Then he stops his measured tread and ruffling his feathers and assuming a bunched aspect, proceeds to give vent to his charmingly ludicrous ditty. The notes much resemble the words *plum pud'n* accent on *pud*, and for this reason the oddity has been given the name of Plum Pudding among the many other appellations with which this peculiar bird is favored. Of course the sounds could be readily likened to other words, as with the notes of all other birds which we have been taught to associate in notes and words. However *plum pud'n* seems a capital name for this wader.

When singing the performer goes through a surprising series of motions, making peculiar snakey movements with its head and neck with each sound uttered. These movements, together with the sounds, which are hollow and reverberating, give the species the name of Thunder Pumper.

Then there are the notes *ka whack*; or if you wish, *ka sock*, which exactly

resemble the sound of pounding with a heavy maul. These notes are also very deceiving as to their source, and yet are so marked in their resemblance to the sounds produced by driving a post, that we look about to see the man engaged in building a fence near. When an amateur is told that the sound is produced by a bird, the Stake-driver, he is not surprised at the name adopted.

I believe the notes *plum pud'n* are the love ditty and think they are mostly used in spring; yet I have heard them in the autumn as late as October 15th. There is another name for this bird, which, with the general name of Shitepoke, applied to Herons and Bitterns as a whole, makes the Greater Bittern a species of many names. I refer to the cognomen Barrel-maker, given undoubtedly because of the similarity of its *ka sock* notes to the thumping noises made by a cooper in hooping his barrels. *

I once slept on the prairie in the early part of May in Illinois. It turned out that I was surrounded by a lot of sloughs inhabited by an army of Barrel-makers. It was a good night for night flyers and the way the Snipe, Sandpipers and other smaller waders flew about my camp-fire was a caution. All night long the continuous shrill cry of the frogs in the bog, together with noise of towering Snipe and many other odd sounds, and from unknown sources, kept pace with the clatter of the so-called Barrel-makers in the marsh near by. This was the time I learned why this bird is called Barrel-maker.

Some time in May, usually in the early part, the Stake-driving, Barrel-making, Thunder-pumping son of a Plum Pudding, Indian Shitepoke builds a nest,, and with the assistance of Mrs.

Shitepoke Plum Padding proceeds to rear a family. The nest is always on an elevated situation and generally free from all chances of inundation. Sometimes it is way off in the marsh and again it is quite easily accessible. But wherever it is, it is always just where we don't look for it. In other words it is hard to find. A good collector may hunt for years and not find a nest, and then, when least expected, run onto a fine set of eggs. A young friend of mine found four sets in a space of a few rods square and yet he was not on the lookout for an egg. However the species does not generally build in rookeries, and is in fact less disposed to be gregarious in nesting season than any others of the Herons.

With an observer who has time and inclination, it is not a difficult matter to find a nest by watching the birds; however the nests are rarities and good sets of eggs grace but few collections comparatively.

The number of eggs is generally four or five, and quite as often the former number and sometimes only three. Again I have heard of six but cannot substantiate this set.

The eggs are of a muddy color, difficult to describe, and I might call them of a coffee color if I were to rely on my opinion. Someone has said that they are of a brownish-drab or isabella color, and I guess the latter color describes them as the hue is peculiar and unlike that of any other egg that I know of. The eggs are nearly or quite two inches long and about one and a half in their smaller diameter, and are usually nearly elliptical in shape.

The nest is a rude structure of coarse grass and rushes and of course quite unlike the nests of any others of the Herons. The young are curious little bunches of down when first hatched, but quickly lose their beauty when they assume the naked appearance, or after they get their pin-feathers.

* Still other names are Bog-trotter and Bog-bull. Oliver Davie says that it has a hoarse gurgling cry of alarm. I have suddenly come upon one when feeding and as it flew away startled it uttered some peculiar resounding notes, but usually they are silent in flight.

Captive Bitterns are easily taken care of as they will eat most anything in the flesh line, and they sometimes get to be quite tame, but are never cleanly.

ELLA KA SANDS.

The Birds of My Window Tree.

Back of my office window a modest oak of small stature ekes out a precarious existence from the back yard of a mercantile establishment. The life of this tree has been circumscribed and its growth retarded by the encroachment of various structures. It is surrounded on the east and south by business blocks, and on the north and east by low, one story barns, upon the roofs of which some of its boughs lean languidly through the long summer months.

This year's (autumn of '95—ED.) foliage has served its purpose, and is slowly passing away; the leaves of the top-most limbs hang in reddish clusters, which faintly rustle at every movement of the wind and send a shower of seared leaves fluttering to the earth. Most of the outstretching twigs have already disposed of their burden and stick out their naked forms from the mass of the foliage at various angles. Here and there a tuft of leaves still cling to the tip of a twig that bows and sways in the breeze. The lower foliage does not show so plainly the ravages of approaching winter, yet seared leaves are scattered here and there over its surface, and many of them have joined their companions upon the earth below. Every day the mantle of summer grows thinner, leaving gaping rents, through which the wind whisks about the gnarled trunk.

At present the tree reveals no sign of life, but every movement of the scraggly boughs, every rustle of the withered leaves, recalls the livelier scenes of the departed seasons.

During the year I watched the birds that frequented this lonely tree cooped

up in the midst of a small city, and found that no less than fifteen species of birds paid it at least an occasional visit, and doubtlessly there were others that escaped my observation, and that one species, the House Finch, which loves the busy marts almost as well as the English Sparrow, built its nest and reared its brood in a secret nook in the foliage.

The first species I noticed was the Audubon Warbler; a group of these birds visited the tree late in January, flitted about and departed. Several of the same species were noticed twice again in February, but their stay was short. Several Western Robins paid me a short visit early in February, and on the fifteenth of that month, five lively Western Bluebirds busied themselves for a while gleaning their breakfast from my oak. The Heerman's Song Sparrow was a frequent visitor during the spring, and for several days a pair of Mourning Doves loitered about the tree and I thought they would nest there, but I suppose they selected a more congenial spot for they disappeared and I saw no more of them.

On March tenth my eye caught a glimpse of red among the green leaves, and I proceeded to investigate. I found one of the most beautiful birds of this region, the Red-breasted Sapsucker, clambering about the tree in search of food. Quite frequently I noticed one or more American Goldfinches about the oak, and during the fall months their visits in groups have been quite numerous. A Mockingbird that nested in the neighborhood, came to my tree for several mornings in the month of April and made the air ring with his joyous melody, but finally he deserted the lonely oak, and I heard him quite frequently in the top of an oak in the adjoining block.

My most frequent visitors were the House Finches, a pair of which reared their brood in the tree, but deserted it

early in May, when the young were able to fly. The male was a happy creature and spent a great deal of his time singing to his mate. In the last of April, a California Shrike, seemingly bent on mischief, caused quite a commotion in the household of the Finches, and to prevent a catastrophe. I drove the intruder from the premises. The bulky form of the Red shafted Flicker was seen about the tree upon a number of occasions, but its visits were always short. A California Woodpecker was also among my visitors, but like the Flicker, he never remained long. Among the other birds I noticed about the oak were, Bullock's Oriole, Western Flycatcher, and Anna's Hummingbird.

A week ago, while I was busy at work, I was greeted with the loud, cheery whistle of a Western Meadowlark that had strayed far from its home in the pasture-lands, and had settled down upon the oak to give me a few moments entertainment.

These observations, taken at random moments, show the amount of bird-life one meets with, even in unfavorable localities, in spots far removed from field or woodland, where our feathered friends are usually found.

HARRY C. LILLIE,
Visalia, Calif.

Mounting Birds Nests For a Collection.

I have an easy and simple method for mounting birds' nests, which may interest the readers of this valuable little paper.

I take a limb of a tree, with pretty bark on it, for the base of the stand, and saw it up into sections, the diameter of the limb, and thickness of the sections depending upon the size of the nests to be mounted. I then procure some pronged twigs, dogwood generally being the easiest to find, and making a hole in the base, stick the twig up in it and set the

nest in the prong, and by passing a black thread over the nest it will be secured in place. Some nests are of course often built in suitable twigs for the purpose, and often it will be better to set some nests right on the base. After mounting the nest the stand can be decorated with moss, etc., if desired.

J. H. FISHER, JR.,
Baltimore, Md.

The Hairy Woodpecker.

Though quite common throughout its breeding range, especially in eastern Kansas, its nest is not at all common. Of course we are all of us familiar with the Woodpecker's nest in general, but unlike the other species, with which I am acquainted, it does not often select a dead stub or tree, but, more usually, prefers a live tree that has a decayed center. After boring through the green portion it can easily hollow out a sufficient nesting cavity. Sometimes they will peck in just below a decaying limb. But I know of no instances where they bored through the green portion and stopped. So that they must have some faculty (probably by sounding) by which they can select the proper trees. The cavities thus formed are usually from one to two feet in depth. The pearly white eggs, usually four in number, are laid on the removed chips. The nest may be discovered by the chips under the tree and also by its call, which much resembles that of the Red-headed Woodpecker.

ORALI K. WILLIAMSON,
Lawrence, Kansas.

A Finishing Touch.

All eggs, before placing them in the cabinet, should be rinsed out with a mild solution of Corrosive Sublimate, in which has been dissolved a little isinglass. This forms a coating on the inside, which makes the shell less transparent—gives more the natural color, and makes it firmer.

Dr. A. G. PRILL,
Sodaville, Oregon.

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The Red Cockaded Woodpecker.

(*Dryobates borealis*.)

It seems that very little is known of the habits of this interesting bird, most ornithological writers taking their statements from the older ornithologists, Aububon, Wilson and others.

The range of this bird is a very narrow one, it being confined to the most southern pine forests of Florida, Louisiana and the intervening states, and

hence its specific name, *borealis*, is somewhat of a misnomer.

My first acquaintance with the Red Cockaded Woodpecker was in December, '93, in St. Helena Parish, La., where I found it to be rather common in the high pine woods and I had ample opportunity to observe the bird and its habits. This Woodpecker is in size between the Hairy and the Downy, or about the size of a Yellow-bellied, although of stouter build.

When it is a good way up on a pine tree it appears entirely grayish-black and on closer inspection bars of white extending across the back and wings and a streak of white on either side of the head are noticed, but no red is seen until the bird is killed and in your hand, when a red line between the black cap of the head and the white face becomes visible. In the female this red is wanting. The bird has less white than any of the genus and on this account may be easily distinguished.

The birds are usually found in the pines that are close to clearings, especially if there are dead ones, and are rarely seen in deeper woods. In several instances I found the Red Cockaded Woodpecker in company with the Downy, or at least on the same tree, and generally the diminutive Brown-headed Nuthatch (*Sitta pusilla*) was to be found in the immediate vicinity. The Red Cockaded Woodpeckers are remarkably quick and their dodging proclivities baffled me for a while in my attempts to shoot one, as they always kept on the other side of the tree. They usually start at the bottom of a dead pine and make their way up to the top, but more frequently are seen in the upper branches of the live tree, sometimes in the "bud" itself.

I was told that the birds were common there the year around and was shown several of their nests in dead pine stubs on the edge of the woods,

from fifteen to thiriy feet up, but beyond this I know nothing of their breeding habits. I hope, however, to visit that neighborhood during the coming season and should I be successful in learning more of the habits of this bird I will let the readers of the OÖLOGIST know the result of my trip.

DRYOBATES,
N. O., La.

A Few Questions For Ornithologists.

1. How many eyelids have birds?
2. Of what use to birds is the bone we commonly call the wish-bone?
3. What bird traverses three elements with ease?
4. What bird or birds have the habit of placing the cast off snake-skins in their nest?
5. Should we pronounce the scientific names of birds with the Latin pronunciation or the English?
6. Which, in your opinion, is the most handsome of American birds? The most intelligent?
7. What bird does the most good? The most harm?
8. Are albino eggs caused by a disease in the female birds, or not?
9. Do birds cover their young ones with their wings or bodies, or by other means during a storm?
10. Has any reader of the OÖLOGIST seen, or heard of anyone besides Audubon, seeing any of the *Caprimulgidae* especially the Chuck-wills-widow, remove move their eggs in their mouth from their nest, after it had been disturbed?

PATRONUS AVIUM,
Niles, Mich.

Two Freaks and Other Notes.

Under this title I will describe first a peculiar specimen of *Merula migratoria* (Am. Robin), which I have mounted in my collection. The bird was shot by Wm. Sheldon, of Chili, N. Y., on the

3rd day of April, 1893; hence, necessarily, in full spring plumage. But what an odd looking Robin. It is nothing to wonder at that Mr. Sheldon did not know what he was shooting at. I probably should not have known myself. The bird, a male, was colored as follows: forehead and lores, white; crown, white with two slate-colored feathers in upper center and two in right supra-orbital region; occiput, white with one slate-colored feather in center; hind neck down to inter-scapulars, white variegated with light slate or gray. Interscapulars or back, scapulars, rump and upper tail coverts, dark gray, except as follows: one white feather in middle of back, four in right scapulars, two on forward edge of left scapulars and the longest feather in upper tail coverts white. Sides of head, throat and jugulum pure white. Breast and abdomen, light ferruginous or brick red, more than half the breast feathers being tipped with white, and a pure white spot in the center of abdomen. Anal regions under tail-coverts and tibia, white. Wing coverts on both sides equally mixed with white and slate. The first four primaries in each wing, pure white; the 5th and 7th, slate; the 6th and 8th, white. Secondaries and terials, mixed slate and white, the slate predominating and not alike on each wing. Outer tail feathers, pure white, next two tipped with white, extending up the outer web $\frac{1}{2}$ an inch, all the rest slightly tipped with white, the left hand upper feather being two-thirds white, extending over nearly all the outer web. Beak, light yellow and semi-transparent, legs and feet similar when taken, but have since changed to a light brown. Eyes with brown iris and black pupil, therefore not an albino. However if you could see it you would all agree that no description could give a correct idea of this patched-up bird.

In size it is normal, and those who saw it alive say it appeared to be healthy.

My second subject in this article is a young male *Dolichonyx oryzivorus* (Bobolink). It was shot by my brother on the 6th day of August, 1894. The bird was feeding with a large crop of its kind on Black Creek, and attracted his attention at once by its color. It is a yellowish white or straw color all over, with just a shade of rusty in the center of the back. Bill, feet and eyes white, a well marked albino. I know from the appearance of the plumage and the skull, that it was a young bird of the year. It would be interesting to know what the next moult would develop.

In the October '94 OÖLOGIST, I find an article on birds nest by Glover Allen, which interests me very much. He asks for opinion as to the reason that the Am. Robin, Crow, Blackbird or Purple Grackle place a layer of mud between the outer and inner portions of their nests. Well, we don't have the Purple Grackle here, but his half brother, the Bronzed Grackle is very abundant, and I believe that Mr. Allen's explanation of this peculiarity in the Red-wing's nest holds just as good with the Bronzed Grackle, as that bird even yet shows a tendency to nest much like the Red-wing, along the banks of Black Creek and Mill Creek in Monroe County, N. Y. Possibly the majority of them did this once. As to the Robin and Wood Thrush, I find that these birds, where they nest in comparatively secluded or protected situations, do not use much mud, in fact, the Robin, when nesting in buildings, sometimes uses only a trace of mud. I think it quite possible that these birds use mud for stability alone, as it certainly makes their nests more firm and ensures their clinging more tenaciously to the limb on which they are placed. At any rate, the Thrushes nesting close to the ground do no use mud, but large quantities of dry leaves, to keep out the moisture. I am not sure that the question of firmness does not influence the Red-wing

ome when building. In any event let us hear all the opinions and study closely, that we may verify or disprove,

E. H. SHORT.

Two Fierce Great Horned Owls. (*Bubo Virginianus*.)

I was told of a very curious case some time since, which happened in Nelson County, Va., some years ago, and thought it might interest some of the readers of the OÖLOGIST. In that county there dwelt two "Old Maids" who lived alone, excepting an enormous Bull-dog who was their constant companion. One evening while driving up the cows to milk, they had to go through a little grove which was situated a small distance from the house. As they entered the grove they were attracted by the yells of their friend, Mr. Bulldog, and much to their surprise found that two large Gt. Horned Owls were the cause of the disturbance.

They had their talons firmly fastened in the dog's back, and were beating it to death with their wings. The air was alive with hair and feathers, when these plucky old women opened an attack with their sticks, and succeeded in killing one of the Owls, while the other flew away, grieving over the loss of its mate, and the interruption of its supper. The latter was the cause of the combat. It was in the depth of winter, and the Owls becoming desperate from hunger, made this bold attack. The dog was eating the carrion, which the Owls had "spotted" for their supper.

J. W. D., JR.

An Unusual Site For a Robin's Nest.

As I was crossing a partly plowed field in the spring of '94, I noticed that the farmer who was plowing suddenly stopped his horses, and going in front of them seemed to be examining something on the ground. I hastened across

to him and found him looking at a Robin's nest on the ground. He said that the bird flew from the nest just as the horses were almost over it. I removed the nest from the ground with difficulty, as it was securely fastened to the earth, and I took it home. The eggs, which numbered four, were of the same size as the other eggs of the species. The nest was composed of layers of mud and grass as usual, but it was more shallow than ordinary Robin's nests. There is no doubt of the identity. Did you ever hear of a Robin's nest on the ground in an open field where the grass was not three inches high?

DONALD DEWITT,
Lawrenceville, New Jersey.

Notes From North Carolina.

Bachman's Sparrow: This species is somewhat shy in its actions when flushed from the nest, running off a little way, beating the ground with their wings. They build their nests in a slight depression in the ground, and nests are nearly arched over. They do not fly from the nest, but run through the grass, and by standing still and watching, you will soon see the bird sneaking back to the nest.

I have found three nests of four. All three nests were in a slight hollow and made of fine, wiry grass. They commence to build about the last of April, and I think they rear two broods in a season, because I found two nests in middle of June. One nest was June 20, 1893, under a tussock of grass, in a slight hollow, made of wiry grass. The nest found June 15th, contained fresh eggs.

Blue Grosbeak: The Blue Grosbeak is a tolerably common bird, breeding where the first growth of timber has been cut down, and a growth of low bushes have replaced it. Nest is usually about 4 to 15 feet high. Begins about the last of May and generally two broods in a season. A characteristic of

the Blue Grosbeak's nest is that it almost invariably contains a snake skin in the outer material of leaves, etc. July 2. Found a nest with four eggs, in a small oak thicket about 12 feet high, of grass, sticks, roots and leaves lined with roots and contained a snake skin, eggs slightly incubated. July 7th. Nest in a small dogwood bush about 5 feet high, three fresh eggs. Made of sticks, roots, leaves, etc., lined with hair and contained a snake skin. July 7. Nest with four eggs, in a small thicket about 10 feet high, of leaves, sticks, roots, etc., lined with grass, eggs fresh.

Pine Warbler: A common summer resident, nesting in pine trees, ranging all the way from 8 to 80 feet high. A nest with four incubated eggs were taken from a nest in a pine tree, about 20 feet high, made of chicken feathers, spider webs and other fibres, lined with hair and feathers.

H. GOULD WELBORN,
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I have in my possession a female American Goldfinch. On the 12th of the present month (July) she commenced laying and on the 22d she laid the eighth egg, all but one—which was cracked—being left in the nest. I thought I would mention the fact, as I have examined probably 30 or more nests of this species, and have never seen but 4 or 5 containing as many as 6 eggs.

C. N. PELTON,
Milwaukee, Wis.

A Variety of Minnesota Ducks.

Under notes of Oct. 5, '89, I find the following:

Among the ducks I shot today were, male and female Pintail, male and female Mallard, male and female Scaup, male Red-head, Gadwall, Widgeon and Green-winged Teal. One of party shot a Ruddy Duck. Saw a few Buffle-heads.

L. O. DART,
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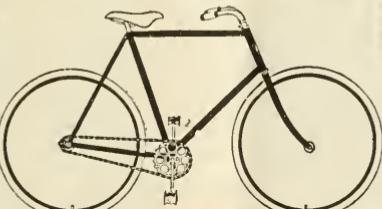
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VOL. XIV. NO. 10.

ALBION, N. Y., OCTOBER, 1897.

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WHOLE NO. 137

Bird Lists and Bird Songs.

This article does not refer to regular lists of birds, the result of years of study in a locality, or of the compilation of State lists. Information is desired as to how many species of birds you have seen in a day in the region where you have observed. How many kinds of birds did you ever see (fully identified) in one day's trip in forest and field, on lake and stream?

The writer is one who has kept lists of the birds seen on his trips, that is, important outings, for the last twenty years. The fewest species I ever recorded in summer was a list of sixteen taken on an eight mile ride on a warm August day and when the birds were silent, and mainly under cover. My average has been about forty species for a half day's outing and sixty for all day if I took an early start. I have never recorded fewer than fifty species when I have begun recording in early morning until noon, and I have noted down over fifty from three to six a. m. in a good locality. It is a common thing for me to note 70 to 80 species of birds in a good long cross country tramp where I have the advantage of observing the migrating hosts, and as well the marsh and shore birds, and the city and country yard birds too.

In starting out, particularly at about three a. m. it requires a rapid pen to keep up with the concert and if the edge of a woods is visited it is not rare to record thirty to forty species within five minutes, and a score of these will be crowded into a space of as many seconds, when the pencil is half busy. I have many times recorded the species by their notes at early hours and have found that they do not vary much as to precedence in singing in a locality,

though great variation exists in different sections.

Of course an observer has to be familiar with all the notes of the different birds that are encountered. I know the notes by heart of about 146 species, and am rarely if ever in error as to identity of either calls or songs. An observer of this kind of listing must also be able to tell a bird in flight at some distance. Many observers use an opera glass in their searches, and I believe this a good practice if one is to study a nesting bird, but for an active bird the glass is idle. My senses are perfect and I can see, hear and record ten species while the opera glass faddist is trying to focus on one bird.

I have recorded thirteen species on a tramp in January, including three Woodpeckers, Owl, Hawk, R. T. Diver, Grouse, Crow, two Sparrows, Creeper, Horned Lark and Redpoll. My list shows 38 recorded one day in March. In May, 1879 I listed 88 species in an all day's trip from 4 a. m. to 7 p. m. in Kent and Ottawa Counties, which included a 24 mile drive with varied conditions, soil, etc., and a run in pinery and hard-wood. This is my best and largest list; but it can be beaten. I am satisfied that I can find and identify 100 species of birds between three a. m. and the time for the evening song of the Whippoor-will by driving about a devious route which embraces lakes, rivers, marshes, city, country fields, uplands and lowlands, oak and timbered lands, and never leave my seat in the carriage. To accomplish this it would require a forty mile drive. Of these 100 species I would readily identify 70 or 75 by the notes alone; the others by sight, as the Hawks, Swallows, etc.

In some localities where birds are few as to species, it is difficult to record

many kinds. This was noticeable in Montcalm County, Michigan, where I lived four years and yet only gathered a list all told of the species, and I never listed much over 50 species in one day—even in May. This was a comparatively new country in 1880 and the birds following civilization had not yet fully arrived. Advanced cultivation with still plenty of woodland, lakes, streams, etc., always produces a much larger list of birds notwithstanding that several species are nearly or quite exterminated thereabouts; for instance, in Kalamazoo township, six miles square I can by slight effort record more species of birds in a given week of observations than I saw combined in four year's observation 1880-84 in Reynolds Township, Montcalm County; for Kalamazoo County is nearly forty years in advance of the more northern county. I am familiar with with over 170 species in the neighborhood of Kalamazoo, while with the assistance of fellow observers I have recorded a list of over 230 birds in the county.

A lady who is a lover of birds and a reliable observer visited Kalamazoo last spring, and I took pleasure in showing her about. On one drive of nine miles with horse and carriage in which we visited two pieces of woods, we saw and heard 47 species of birds in a a trip from two to six p. m. which is not the best part of the day. I was agreeably surprised in the accuracy with which she identified birds songs. She did not make one error on the trip and was often ahead of me in naming a songster, and only failed—in the case of three species, the identity of whose songs she could not give as the birds were new to her in the woods. They were the Acadian and Traill's Flycatchers and the Long-billed Water Thrush. This lady is near-sighted and has to rely largely on her opera glass, yet so accurate and methodical is she in identification that she now identifies by ear in almost ev-

ery case. On hearing the odd notes of the Traill's she left the carriage and with her glass studied the movements of the little Flycatcher about the willow copse for twenty minutes.

Our drive led us through a leafy, grove-be-girt road known locally as Lover's Lane, and of course I fell in love with her. Why should I not? She is one woman in several millions. I do not believe there are five women in America who can equal her, and I have collected, walked, talked, ridden and rowed with dozens of men and boys who styled themselves Ornithologists, who did not comprehend the songs or identify their owners in one-third or fourth of the notes questioned about. Let me add that this lady has not a collection of eggs and but a few bird's skins and they are not for cabinet but to illustrate her talks, for she has classes who listen to her with pleasure.

To a true lover of birds it is much more of a pleasure to take a trip and talk with a companion of this pleasing type, than to listen to a collector tell how many sets of eggs he took, or how many birds he shot. Surely with our dear birds in consideration we ought not to cast true sentiments aside and give over to the greed of gain, and it is largely nothing more, in amassing big collections without knowing their true value.

MORRIS GIBBS,
Kalamazoo, Mich.

Rallidæ of Southern Louisiana.

The most common Rail found here is the Sora, *Porzana carolina*, which is a migrant, arriving here about the middle of August, and departing during the latter part of March.

How they endure their long flights during migration is a mystery to me as here they never fly more than a few yards and then, only a short distance above the ground. Very often they are

caught in this manner by dogs that run after and pull them down.

The specimen before me now was caught in that way and the bird brought to me alive and uninjured. They literally seem to swarm in the rice fields and swamps where they are killed in great numbers by hunters, and in fact are a source of annoyance to persons trying to hunt other birds found in the same field.

After the rice harvest is over many are killed by children who knock them down with sticks as they rise from the short stubble.

Their flight is so uncertain that one does not know whether they will continue or drop in the grass. When started, they make various sharp turns, often running between the dog's legs making him turn a sumassault in his eagerness to catch the game. Sometimes to elude their pursuers, they fly a short distance, light for a second, fly again, and then run as hard as they can.

As the Sora departs early in the Spring I am ignorant of its nesting habits, beyond what I have read on the subject.

When they arrive, the only difference between the old and young of both sexes, is that the latter have no dark throat line and less black about the base of the bill and face.

After the Sora, the King Rail, *Rallus elegans*, is most common. It is a resident but is not seen much during the Spring and early Summer month, as it withdraws to nest along the bayous and deep marshes. This is the largest Rail we have and ranks high in the list of game birds of this parish (Plagnemine).

A series of measurements taken by me this Summer were as follows: 14.00 x 18.00, 14.50 x 21.00, 17.75 x 23.50. m. m. The first was killed early in August and was probably young.

Its nest consists of a platform of reeds and woven grass, placed a few inches

above high water. The eggs, about a dozen in number, which are creamy splotched with brown, are very much liked by the natives who go out during the nesting season and secure baskets full, for edible purposes.

They say that the flavor is delicious.

The young are blackish and brownish, the barred black and white not appearing for some time.

They are very active little fellows, following their mother through the swamp when they are only a day or so old.

On one occasion my father saw an old Rail followed by her young, attempt to cross a ditch. The old one crossed in safety but the young, after entering the ditch were unable to get out again, and would have drowned but for his assistance, but on being stretched on the ground they rapidly recovered and scampered off.

The Purple Gallinule is undoubtedly the most beautiful bird found here—its brilliant plumage displaying every tint of the blue, violet and olive, contrasted with its bright red bill tipped with yellow and its snow white crissum. However it does not rank very high as a game bird as the flesh is tough and stringy. About a dozen eggs, shaped somewhat like those of a common chicken constitute a clutch. Several sets secured this year averaged 12.00 x 21.00. The plumage of the young varies very much. One killed last September was greenish all over, while two, obtained a few days ago, were deep brown above, tinged with blue and olive and almost pure white below. The color of the frontal sheath also varies, being either red, green or brown.

Though its feet are not webbed it is an expert swimmer and a fearless diver, differing in the latter respect from true rails. When flushed it usually lights in a bush or a pile of weeds, preparatory to running off. Its flight is rather slow, their long green and yellow legs, awkwardly dangling behind them.

The Purple Gallinule does much to harm the rice crops, as they are not satisfied with picking up grains from the ground, but bend the stalks so that what rice is not eaten is wasted.

H. L. BALLOWE,
New Orleans, La.

Gulls in the Reservoirs of New York City.

The American Herring and Black-backed Gulls arrive here about the middle of October and leave early in March.

They are very plentiful on the Hudson river and flocks of several hundred may be frequently seen, but it is of their appearance in the reservoirs of which I am going to speak.

Central Park, as its name indicates, in the very center of the city. It contains several lakes, on which people are allowed to skate in winter, and row in summer, and three reservoirs, which supply the city with water.

The largest of these reservoirs is over a mile and three-quarters in circumference, is of an irregular shape and is well stocked with fish.

Here the Gulls congregate in large numbers, so that it is not an uncommon sight to see several hundred swimming in and flying above the centre of this sheet of water,

They have become a great nuisance, not only on account of their fouling the water, but their feathers, which they leave behind in large numbers, fill the screens of the gate-houses so that the water cannot flow through, and it gradually rises until it threatens to carry the screens away.

Almost exactly at 2 p. m. the Gulls rise in a body and circling up, fly over to the Hudson River.

Many schemes have been tried to rid the reservoirs of these pests, but all, so far, have failed.

ROBERT C. WOODHOUSE,
New York City.

Persevering Nesting of *Contopus vir-* *ens.*

Some years ago I remember of reading in a number of THE OÖLOGIST, an account of the habit of the Wood Pewee, of removing its nesting material, when dissatisfied with a position, to a more suitable spot.

In 1895 I had the opportunity to personally verify these observations.

Unfortunately, being very busy, I neglected to record most of the dates, so can only give them approximately.

On June 14 I went into my orchard to hunt up the home of the *C. virens* family, which I knew must then be in building. I located it nearly finished.

In a few days I found that from some cause, the birds were removing the material, and soon located a new nest in another portion of the orchard. In a few days this contained two eggs. A load of hay passing under this nest threw the eggs out.

Soon the material of this nest began to disappear, and some weeks later I located a third nest, some 75 rods from the last, entirely out of the orchard, in a small hickory tree, beside a road.

It then contained two eggs. They were thrown from the nest, presumably, by a small boy trying to get them.

I supposed that this would end their nest-building for the season, but about a week later I discovered another nest in the orchard containing two eggs. The heavy storm which visited us just after that, destroyed that nest also.

Inside of a month this pair of birds had built four nests, moved the material twice, and laid six eggs. I trust that fortune at last smiled on their efforts.

B. S. BOWDISH,
Phelps, N. Y.

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FRANK H. LATTIN,
Albion, Orleans Co., N. Y.

Cardinalis cardinalis.

I submit this straggling article on the Cardinal and its nesting, in hope that it may interest, and to some extent prove edifying to some of your collecting subscribers, who have not had the opportunity of personal investigation. Original articles never fail to interest one, regardless of the qualifications of their writer. I trust there may be others in the same boat with myself.

The Redbird, as it is familiarly called, is quite a common bird hereabouts,

being indigenous, and remaining with us through summer sunshine and winter solitude, charming all lovers of bird-life by its vivacious melody and magnificent attire. The male is a strikingly handsome bird, with its erectile crest and bright cardinal color. The female, though not so gaudily dressed, is by no means homely.

Like many other birds, the Cardinal is very shy and retiring during the winter months, confining himself to thick undergrowth, especially along the banks of rivers, seeming instinctively to know that his gay plumage would attract universal attention along the highways and open places. His song also during this season is restricted to a sharp monotonous, *whit-whit*. However, when spring approaches he throws off all reserves, perches himself on some wayside tree and pours forth his strong, melodious, *whitloo-whitloo-taw-wee-taw-wee*, oft repeated, with other variations and modulations, rendering quite a lively and harmonious love-song—cheering his mate in her lonely task of incubating their mutual treasure, and gladdening the heart of all who have ears to hear and eyes to observe.

There is an old saying round here, to the effect that all birds pair on St. Valentine's day; from close observations I have come to the conclusion that the Cardinal is already mated at this early date, in fact, I am of opinion that the male and female remain in close companionship the year round, as in nine out of every ten instances I have always found them in close proximity. Perhaps in deference to other species they hold a sort of honorary wedding on Feb. 14th of each year.

During the past four years I have found a great many nests of this bird; the favorite nesting site being in low, bushy cedars, which abound on the hillsides of this locality. At least three-fourths were found in such situations, with numerous Song Sparrows, Mock-

ingbirds and Yellow-breasted Chat for neighbors. The height from the ground varies from two to eighteen feet in my experience; six or seven however is according to the majority, the correct thing.

Strangely enough, amongst all the nests I have found and examined, numbering at least sixty, I have never been able to discover more than three eggs in one nest, though I have found them in all shapes of incubation, and with young repeatedly, yet three was the invariable number of a full set. I have noticed authorities on the subject claim four and sometimes five as the usual complement; and it has occurred to me that possibly the Cowbird may have taken a hand in evening up matters, as some specimens of each species so closely resemble each other as to defy detection. I have not met with Mrs. Cowbird, or a specimen of her "oval imposition" in this district, and for that reason I think it very probable that the large set of four and five were taken in localities where the two birds abound in common. It would be interesting to hear from other collectors regarding this.

The nidification of the Cardinal commences here, early in April.

The earliest nest I examined last season was on April 18th, it was situated in a small cedar six feet from the ground and built in the usual way, neither loose nor compact, neither deep nor shallow, Grosbeak style, and easily recognized without close examination; the materials were weedstalks, grasses, and cedar bark, with an occasional leaf for variety; the lining was quite smooth and neat being of fine rootlets and fibres.

The nest contained two fresh eggs of ordinary type, spotted profusely with dull brown and grayish drab on a white ground, they measured 1.05 x .75 and 1.08 x .78.

On the day following, I took a beau-

tiful set of three partly incubated eggs, from a nest built in a tangled grapevine, twelve feet from the ground and well concealed. The female flew from the nest, as I approached and was at once joined by the male; both were very fussy and assiduous in trying to guard their little domicile.

The nest like the other was composed of weeds and grasses and lined in a precisely similar way. The eggs were beautiful specimens, one having large chestnut blotches over the greater part of the egg and the others being more heavily marked than usual, they form a handsome set.

The eggs of the Cardinal vary greatly both in size and color. I have one specimen so covered with dull brown as to look like an egg of the Skylark. Another similar, only the small end is dark cream color, and still another white with a few ashy spots diffused over the surface; all being about average size. A nest containing three nearly fledged young was pointed out to me on August 2, 1893. The earliest record of eggs was April 3, 1891.

W. W. WAKE,

Nesting of the Crossbill in Maine.

It is now quite generally understood that the Crossbill nests early in the season while the snow is yet on the ground, but comparatively few nests have been taken and accurate nesting dates are few and far between. Through the kindness of my friend, Mr. P. H. Dunn of Brewer, I have received some information of the nesting of this species which may be of interest to readers of the OÖLOGIST. The finding of the nest of the Crossbill, as related by Mr. Dunn is substantially as follows:

"I spent the winter of 1885-7 in Piscataquis county, about thirty-five miles north of Greenville in a logging camp on Bear Brook five miles from where it

empties into Ragged Lake. Throughout the winter Crossbills were numerous about the camp and very tame.

"As the salt-pork barrels were emptied they were placed outside in front of the camp. The salt on the barrel heads seemed very attractive to the Crossbills and nearly every sunny day they were about the barrels in considerable numbers. Some of us younger fellows used to amuse ourselves on Sundays when we were not working, trying who could catch the most birds. We would crouch beside the barrels until the birds were busily at work picking up the salt,* then by cautiously moving our hand to the top of the barrel, by a quick grab could catch a bird about every trial. Both males and females were present.

"The 11th of February, 1886 was one of the coldest days of the winter. With two companions I was at work about three miles from camp and had felled a large pine. The snow was very deep that winter and we had the pine skidded up quite high. I was topping off the pine when I noticed in a small spruce just in front of me a nest with three eggs. I took one of the eggs from the nest and held it up to the others to see. On crushing it I found it perfectly fresh and not frozen though the day was extremely cold; our whiskers were full of ice.

"A pair of Crossbills were flying about, uttering cries of distress. Their

cries soon attracted other Crossbills and in a short time fully two dozen birds were flying about our heads and calling. The nest was placed in the thick bushy top of a small spruce and could be easily seen into from the top of the fallen pine. In summer it might be ten feet from the ground. The three eggs were pale greenish, with dark markings like freckles. The nest and two remaining eggs we did not disturb."

Mr. Dunn was unable to give a description of the nest. To readers who are unaware of the remarkable familiarity of birds about the logging camps in the Maine woods the remarks about catching the birds may seem improbable. Such familiarity is not very unusual, however. The nest found was probably that of our common species, *Loxia curvirostra minor*.

Here in Pittsfield, Crossbills are of rather rare occurrence and I have seen none for several years. They seem rather local and erratic in their distribution, appearing in considerable numbers some winters, leaving not to again appear for several years. It is probable they are constant residents and regular breeders in the coniferous forests of Northern Maine.

C. H. MORRILL.

Grasshopper Sparrow in Illinois.

Among casual observers the little Grasshopper Sparrow is probably the least known of our common prairie-state birds.

Not gifted with either fine voice or beautiful feathers, it naturally attracts but little attention. The absence of attractive features, however, does not seem to affect his happy little nature, or detract from his spirits and from early May until late in June, his curious love-squeaks and twitters (for you cannot call it a song), may be heard in any of our upland meadows.

If you should wish a closer acquaint-

* After this note was written my attention was called to the fact that salt will kill chickens. If fatal to chickens, why not to Crossbills as well? Thinking perhaps Mr. Dunn was mistaken I made inquiry concerning the salt eating and calling attention to the supposed fatal effect, and received the following positive reply: "There is no mistake about the Crossbills eating salt. They were constantly about the barrels and we had every opportunity of observing them. We often had twelve or fifteen birds in the camp at once which we had caught in our hands. Every lumberman in the Northern Maine woods knows the Crossbills will eat salt. If it kills the bird their places must be filled by others for there never seemed to be any decrease in their number." It would be interesting to know if any other observer has noted birds eating salt, and if so, what effect such diet produced.

tance with little "savannarum," go in early June to one of our smaller meadows and sit down. You will not have long to wait.

Soon you will be listening to a long, peculiar, grasshopper trill, which you will easily recognize on account of its shrillness.

To find the author, however, (unless he be conspicuously perched on a weed stem), is quite another matter. He is an adept at ventriloquism and will at once seem in front and on either side of you.

There—at last you have him located, just a few steps—not over a rod in advance. You tread softly, nearer and nearer, step by step, but you seem to get no closer to the squeak coming from the clover.

When you have advanced probably twenty-five yards and stopped with a puzzled expression on your face, you suddenly discover the little deceiver, perched on a weed or fence post, another twenty-five yards ahead. There, he has been, all the time and you are surprised at the distance the little voice has penetrated.

During the hottest hours of midday when the sun is high in the heavens and all other bird-voices are stilled, the Grasshopper Sparrow is in his most vivacious mood and throughout the long summer day until dusk has fairly fallen, his notes are continually heard.

The nest of the Grasshopper Sparrow is placed on the ground—often in a depression below the surface.

It is so neatly and admirably concealed as to generally escape detection and only by the most patient efforts and closely applied searching, can one hope to find it.

May 27th of the present season while crossing a small meadow, I flushed a female Grasshopper Sparrow. As she fluttered from under my feet, beating the ground with her little wings as if sorely wounded, I could but admire this

ruse [she was offering to attract me from the nest.]

I thrust my walking stick into the ground and prepared for the search.

On hands and knees I carefully examined (as I thought) every square inch of surface within a six foot circle, but for a long time I was baffled.

Only by retreating and repeatedly flushing the female was I able to find the nest.

It was composed entirely of grasses and sunken in the ground—neatly tucked under a plaintain leaf, effectually hiding it from above.

The five eggs are of a beautiful pearly white, spotted only on the larger end with rather heavy dots and blotches of bright sienna brown.

ISAAC E. HESS,
Philo, Ills.

Forced "Cowbirdism."

A few seasons since a pair of Bluebirds had a nest in a bird-house of a friend. He was working in the building on which the bird-house was situated, and disturbed the old bird, who had not finished the set. She flew to a Chipping Sparrow's nest near by, and deposited an egg from which the Chipping Sparrow hatched and reared a young Bluebird.

R. W. STRICKLAND,
Forestville, N. Y.

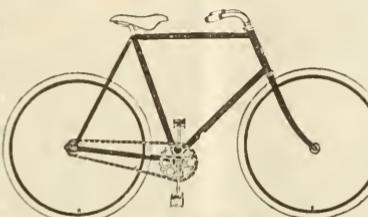
Where Are My Long-eared Owls.

During the nesting season of the Long-eared Owls in 1888 and 1889, it was not uncommon for me to find two or more nests in a days tramp, and see at least a dozen of the birds. But since the spring of 1890, I haven't seen but one of the birds, which was Oct. 24, 1891. When observed the Owl was sitting on an oak log, eating a chipmunk he had captured. Perhaps some reader of the OÖLOGIST can explain the absence of my favorite Owl.

THOS. S. HILL,
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Nov. issue will go to press promptly on Oct. 25, and be mailed during the following week—all Exchange, advertisements and notes for that issue, must be forwarded by return mail to insure insertion in that issue.

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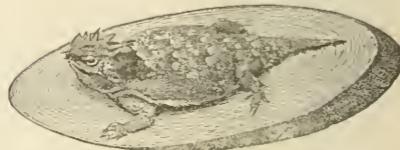
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THE OÖLOGIST.

Monthly.

VOL. XIV. NO. 11.

ALBION, N. Y., NOVEMBER, 1897.

WHOLE NO. 138

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THE OÖLOGIST.

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ALBION, N. Y., NOVEMBER, 1897.

WHOLE NO. 138

Sunday in the Woods.

DEAR OÖLOGIST:

By a series of miscarriages my July OÖLOGIST has only just now reached me. But I beg of you to give me space for a few words regarding the article on "Sunday in the Woods," which is, I believe, calculated to do great mischief.

The columns of our ornithological journals are no places for religious controversy, but when those columns are opened to the violating of sentiments, which, however harmless they may be to those of matured moral and spiritual habit, are likely to mislead the young, it may surely be permitted one who is not merely a christian but a clergyman to lift up, through these same columns, the penny-trumpet of his voice, against one of the most mischievous tendencies of modern liberal religious thought.

When men begin, in all apparent soberness, to advocate the use of the telephone, for the audible transmission of sermons and anthems, it becomes urgently time to inquire, whether some phases of modern Christianity do not savor more of farce, or of delusion, than they do of sober, dignified and uplifting religious thought.

Let me preface further remark by saying that I am most deeply in sympathy with that great—and growing—class of Nature-lovers who cannot commune with Nature save on the Lord's day. In my Kansas days I had a friend—an unbeliever—who was harnessed to the exacting routine of a village store from half past six o'clock on Monday morning until half past nine o'clock on Saturday evening. The woman of his love had been forbidden by a drunken father to marry him. On my way home from church, of a Sunday noon, I used to meet this devoted

young couple as they were returning from the river, laden, for all the burden of their oars, with flowers and moss and a occasional dainty nest. And I remember yet how my heart used to warm toward them as I *felt*: from the sereness of their faces rather than *learned* from any vocal expression of their feelings, that they, no less truly than I, had been gathering strength for the work of the coming day; and that is the noble function of both the religion of Nature and the religion of revelation.

Moreover, I, too—I freely confess—love to seek the woods for ornithological study and observation, in the scanty moments of rest that remain from the exacting duties of the Lord's day. And nowhere, more truly than in the aisles of the woods, has my heart ever been lifted up in fervent praise or in earnest aspiration; and yet I know very well what would befall me spiritually were this the exclusive shrine of my heart's devotion.

The Westminster Catechism—by which I do not swear by any means—very accurately and finely declares that the chief end of man is "To know God and to enjoy him forever." But how are we to know God? If we are to know him at all it must be in his own appointed way. We are His creatures and our highest perfection is attainable only through conformity on our part to his wise and merciful laws.

The modern idea that each man's own soul is a shrine, wherein, exclusively, a man may find intercourse with his God, is as startlingly untrue to the conditions of the natural man as it is to the revelation that God has given us of Himself. The nineteenth century dictum that one may worship God as well in his own home, or in the woods, as in

the place where men are assembled for public worship, is as common as it is insidious. One is often inclined to believe that this saying is far more frequently an excuse for delinquency than an expression of honest conviction. But, with whatsoever motive such a sentiment is voiced, the cherishing of the idea that underlies it involves the ignoring of certain vital facts in the make-up of our common humanity.

"No man liveth to himself." The hermit may escape the bitterness and strife of the forum and the market-place, but he is a one-sided man—he walks with a crutch. Likewise, the man who never worships God anywhere save in the depths of his own soul may, indeed, know somewhat of God, but he will be more than likely to remain in profound ignorance of some of the most lovable of the divine attributes. The soul, like the mind, is engendered and developed in solitude, but both are rounded and perfected only through intercourse. The ignoring of this fact, in the following of the creed of men of modern religionism is instructive as showing how easy is the transition from the communion of saints to individualistic pantheism.

Let us make mutual concession. If it was "liberal thought" that once bathed the streets of Paris with human blood, it was also illiberal religion—New England Puritanism—that has given birth to liberalism. And yet, men with liberal views would do well to remember that they are what they are through the faith and faithfulness of their ancestors, men of strength and force of character, who respect God professedly, yet do not worship Him, are strong and forceful, not by reason of their liberalism, but in spite of it. Give us a Sundayless America with a continental Sabbath and how long will it be before we shall be compelled to flee before a Reign of Terror? By the tender mercy of God these men

may be able to live without corporate religion, but the great world of the growing generation cannot do so. Even as "no nation has ever survived the loss of its religion," just so is no individual safe without the exercise, in company with his fellows, of the religious instinct.

Do I criticise too sharply? Let the following extract reply:

"We would not scare the well-dressed, plios fool
Or knave, who loudly enters with the throng
The so-called house of God, vain-glorious man,
To help his bought-salvation cause along."

"Religious sentiments" and "honest convictions" can hardly co-exist with the bitter sneering that fumes from these verses. Many of us Christians have a very tender sympathy with a certain type of liberals; but we find it hard to think kindly of those that take apparent pleasure in violating sentiments like those quoted above. These words are not worthy of a follower of One Who said, "Consider the lilies of the field"—"They that are whole need not a physician, but they that are sick"—"Behold I stand at the door and knock."

The holiest man I ever saw, he was at the head of a great school for boys, said once, in substance: "If I could only have my own way about it, without shocking the great religious world about me, I would have my boys out on the campus at base-ball and cricket after they had been to church on a Sunday morning."

Here now is a possible common ground between Liberalism and the Church. Only, the whole ground, or none of it, must be occupied by each. It is only after men have assembled and met together "to render thanks for God's inestimable benefits," to "bear His Holy Word," that they have the right to go out, with light heart and joyous step to enjoy the wondrous beauties, ever fresh, inspiring

and invigorating, with which the great Father has filled and glorified His world.

I must apologize to your readers for taking up so much space with matter so "unscientific." But it is a part of the fairness of scientific inquiry, as well as of the generosity of fraternal courtesy, to hear both sides. Those of us that have read and heartily enjoyed the OÖLOGIST for years would fain have it the exponent of all that is generous and uplifting, in human thought and human feeling.

P. P. PEABODY,
Hallock, Minn.

Feather Lined Nest of American Redstart Containing Freak Eggs.

On May 30, 1896, I found a peculiar nest of the American Redstart which also contained a set of four peculiar eggs. The framework of the nest is made of fine grasses and narrow stripings of grape vine bark and the outside being covered with a grayish colored material from weed stalks which gives it the appearance of a Yellow Warbler's nest. The peculiar feature about this nest however, is the profuse lining of feathers evidently brought by the Redstarts from a hen yard about 15 rods away. I have found several nests of Redstarts with a feather or two stuck into the nest but the usual lining of fine grasses and hair prevail here. Three of the eggs are freaks both in points of size and shape. They are pyriform or pear shaped after the manner of Killdeer's eggs and they measure .74x.53, .74x.53, .74x.53, .68x.50 respectively.

C. F. STONE.

Branchport, N. Y.

Nature Study.

A little conversation which I recently had with a lady whose occupation is teacher in r district schools, illustrates

the changes in opinion which a few years have brought about. This lady was most anxious to learn all she could about birds and also to learn taxidermy for use in her teaching. She told me that her scholars showed such enthusiasm that it was hard for her to keep pace with them in such lines.

While we welcome the giving away of the old-time neglect of natural science studies, yet this movement carries with it a new danger. With thousands of enthusiastic young students roaming field and forest what will be the result? How can the few individuals of a rare species escape these eager hands. And of this number of eager searchers, how many will maintain their love and labor in the field of nature through ripe years? When species after species has been gradually depleted into eventual extermination, what percentage can be said to have been sacrificed in a good cause?

Can the tide of study be turned from collecting and mounting to observing and investigating? Can the gun give place to the note book? Or what will be the outcome of this growing interest in natural science and will the value of protection and preservation be realized before that which is studied is forever a thing of the past.

And if the worse of the two alternatives come to pass on whom will the responsibility rest, or who of all can shake away an individual responsibility.

B. L. BOWDISH.

Nesting Habits of the Black-Throated Green Warbler.

Although this bird seems to be fairly common in this locality, I see very little in the OÖLOGIST as regards him. He might be called rare by those not acquainted with his song. After learning his song I was surprised to find how many were in the woods about here.

The Black-throated Green Warbler (*Dendroica virens*) arrives on the coast of Connecticut during the first or second week of May. Often while tramping about the groves of hemlocks and cedars I have heard them singing on all sides. The song generally sounds like *Te de.de de de or Te de de de Birdie*. Although this bird appears to be so common but few of the nests have been found in this locality. It has, however, been my good fortune to procure a set of 4 eggs, also to examine several nests.

My first nest was found by accident on June 18th, 1893. It contained 3 eggs of *D. virens* and one of the Cowbird. They were so badly incubated that I could do nothing with them. The second nest was found by Mr. Henry W. Beers of this city on May 30, 1894. It contained 4 eggs which also were so badly incubated that it was impossible to save them. The third nest was found June 10th, 1894, containing 3 eggs which I left until June 17th when the nest and 4 eggs were taken. Mr. Beers and myself found several other nests the same season and they were apparently destroyed by squirrels.

All of the nests were placed in hemlocks or cedars from ten to fifteen feet from the ground, and with one exception were built at the end of a long slender branch. The nests were composed of small twigs, thin bark strips, a few pieces of dry leaves, and pieces of wooly substances. The lining of hair, weeds, stalks, and feathers. The favorite nesting place appears to be on a side hill covered with hemlocks and cedars. The eggs are four in number and have a ground color of creamy white and are spotted with chestnut and lilac gray, mostly at the large ends. During the fall migrations this bird is very common, disappearing during the second week of October.

JESEE C. A. MEEKER.

Bridgeport, Conn.

THE OÖLOGIST.

A Monthly Magazine Devoted to

OÖLOGY AND ORNITHOLOGY.

FRANK H. LATTIN, Editor and Publisher,
ALBION, N. Y.

Correspondence and items of interest to the student of Birds, their Nests and Eggs, solicited from all.

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Nesting of Clarke's Nutcracker.

Would the readers of the Oölogist like to hear about collecting here in the wilds of Montana? Well, to begin, I will tell you about my *not* collecting the eggs of Clarke's Nutcracker.

Clarke's Nutcracker is about the size of an eastern Blue Jay but more plump. Coues gives a good description of it in his "Key" also a good picture of the bird. They roam about in small bands of four or six, sometimes I have seen

eight together; they are as noisy as a Jay and keep up a continual screaming. They fly similar to a Crow while their cry resembles a Jay. They are wary and generally keep at a safe distance when they suspect danger.

This is my first year up here and of course I had a great deal to learn about our feathered friends. I soon learned the name of the Nutcracker, who has been nicknamed up here a s“Camp Robber.” My brother told me he found a nest last year in April containing young so I concluded they were early nesters. Along in February the voice of the Nutcracker was about all silenced, so said I to my brother, they must be getting ready to keep house. Time went on until one day in March while logging, in passing a tree I noticed a nest in it which I had not noticed before, so I concluded it was a new nest and one of the Clarke’s Nutcracker.

I watched and soon seeing some of the birds around concluded they were the owners. I climbed the tree which was a young pine with limbs from the ground up and nest about twelve feet up. I looked in the nest and saw it was not finished, so I waited. That day I saw the old bird carry some material for lining so I knew the nest was nearly finished; so I waited longer. One day, or rather the next day, while hauling logs I saw the bird on, so I counted ahead, if the bird laid every day I would get the eggs on such a day. That day came and up I went. Old Mrs. Nutcracker was at home and would not leave but opened her mouth in surprise at the horrid being coming up the tree. I reached towards her but she would not leave so I took her gently by the bill and pulled her from the nest and held her in my hand until I looked in the nest, then let her fly.

Yes, I looked in, there were three eggs and such nice ones. I quickly came down and went away so the bird

could go back, which she soon did, and I was compelled to wait for I wanted a full set. Well, to make a long story short, the day before I intended to get them I passed the tree and saw the old birds hopping about and picking in the nest, so I watched them and very soon concluded something was wrong, so up the tree I went, when lo and behold the eggs were gone.

A fresh snow had fallen and the tell-tale tracks of a pine squirrel told the story. He had got there a day ahead of me. I cut down the tree and examined the nest, which looked like a Crow’s nest on a small scale, and here is a description of the nest as I wrote it then. Outer nest of freshly broken pine sticks, next a layer of bark, a thick layer of dry rotten wood in bottom, the rotten wood extending up the sides a piece, then a thick lining of fine inner bark. Nest was deeply cupped and situated in young pine about twelve feet from ground.

The day the squirrel got the eggs was the 18th of March, 1897. I found another nest on the 30th of March containing young, which were about a month old. The nest made same as one described; another nest of last year on tree very near made same way. Another nest I found but eggs were gone, nest built same as the others.

I waded in snow knee deep but could find no more nests. So you see why I did not collect any eggs of Clarke’s Nutcracker this year.

AMOS M. PYFER,
Salesville, Montana.

Oölogist Association Notes.

Members of the Oölogists' Association will please forward their votes upon the following amendments to the Constitution of the Association to the President at once:

- (1) To amend Section 3 of Article IV of the constitution, by omitting all after

the word "application," making it to read as follows: All nominations for membership shall be sent to the Sec'y-Treas. of this Association and shall then be referred to the executive committee which shall pass upon same.

(2) To amend Section 4 of Article IV to read as follows: If a majority of the executive committee shall vote in the affirmative upon a nomination for membership, the applicant shall be elected to membership, and the Sec'y-Treas. shall notify applicant and members who nominated same, of such action at once.

(3) To amend Section 5 of Article V to read as follows: The Executive Committee shall consist of the President (who shall be chairman), the Vice-President, the Secretary-Treasurer (each of which shall be elected for one year) and two Executive Committeemen, who shall be elected for two years each, one to be elected every year. The Executive Committee shall publish all reports, act upon all propositions and applications and be otherwise governed by this Constitution.

The object of these amendments is to simplify the electing of new members, to place same in the hands of a committee, and to reduce the work of the Sec'y-Treas.

All members should express themselves in this matter by voting either for or against the amendments at once.

J. Warren Jacob of Waynesburg, Pa., C. F. Stone of Branchport, N. Y., and W. J. B. Williams of Holland Patent, N. Y., were recently elected to membership in the association.

All members who have not yet sent copy of their notes upon the "Raptores" to James A. Dickinson, Gresham, Neb., should do so *at once*.

A list of unreliable oölogists is to be prepared in the near future. If you know of any who are "crooked" or who have dealt with you fraudulently, send me their names and address at once

and a complete story of the transaction wherein they defrauded you. *Do this at once.*

Members should try and secure new members. Secure a few copies of Bulletin No. 1 from secretary and send same to those you think would be interested, or send me their name and address and I will do so. ISADOR S. TROSTLER,

Omaha, Neb. President.

Breeding of the Mourning Warbler.

In the September, 1892 OÖLOGIST at the close of my article on "Breeding Warblers of Western New York" I gave a list of Warblers which I had good reason to suspect nested in the limits of that article but could not find any positive records. While out on a collecting trip on the 31st of last May I met a friend on the same business. He said he had found a nest in a swampy wood a short ways back that he thought was something rare. At his request I went to the place with him little thinking that I was to make an indisputable record for one of my suspects. My friend led the way to an opening in a low wood one mile northwest of the village of Gaines, this county (Orleans), overgrown with underbrush and various weeds. I followed him to a mass of nightshade (bittersweet) and parting the foliage with his gun barrel disclosed a female Mourning Warbler sitting on her nest just above the ground supported in some old dead brush over which the Nightshade had trailed. On taking flight she revealed five eggs of an unusual type which if it should be constant with the species would easily distinguish them from other ground Warblers. After securing the birds we took the eggs, which proved to be fresh, and the nest. The latter was built mainly of dead leaves with grass blades and lined with fine rootlets and hairs.

Eggs were creamy white, broadly ovate, shell markings of pale lilac over-

laid with blotches and specks of light chestnut and on two eggs a very few spots of a darker brown or umber. All more or less inclined to form wreathes at larger end. Sizes: 73x57; 70x56; 72x56; 69x54; 72x56. Type of markings is very similar to some sets of Black and White Warbler but eggs are smaller and more pointed than that species. The set is now in the fine collection of Mr. W. A. Davidson of Detroit, Mich. I might also mention the finding of nests of Hooded and Cerulean Warbler the same day. The former is becoming quite common here.

ERNEST H. SHORT,
Albion, N. Y.

Queries Answered.

In answer to *Patronus Avium* who asks the questions in your September number would say:

1st. Birds have but a single eyelid, as with most mammals, but they are provided with a nictitating membrane beneath the regular eyelid. Many species have two membranes making three eyelids if you wish to call them so.

2d. The wishbone (clavicles joined) is the better form of bony framework to get a good wing action from the use of the pectoral muscles.

3d. All the Phalaropes fly, run and swim with ease and perfect grace. There are others, but none better adapted than these in America.

4th. The Great Crested Flycatcher and Blue Grosbeak place cast-off snake skins in their nests; the former in about four instances in five; the latter not as often. Other birds have this peculiarity but not regularly.

5th. Do as you like; but if you adopt a style follow it exactly and give the Roman pronunciation: *æ* as *i*; *i* as *e*; *e* as *a*; *a* as *ah*; *v* as *w*, etc. Better to adopt the English.

6th. The Wilson's Phalarope (female)

is in my opinion the handsomest bird in America (not gaudy). It combines perfection in coloration and blending, and as well, necessary to beauty, perfect symmetry and grace in every movement. The Blue Jay is the most intelligent bird, or perhaps the Canada Jay, or else the Black-billed Magpie or Crow. One of these four and I prefer to name the Jay.

7th. A matter of opinion with us no need of discussion.

8th. Albinism to any extent is a variation and hence an abnormality, but it is not a disease, for loss of pigment in shell or feather may be in evidence and the bird remain in perfect health.

9th. Have repeatedly observed parent-birds cover their eggs or young with spreading wings during a rain storm.

10th. Have never seen Goat-suckers transport their eggs, but believe that they do it in some manner. If Audubon says so, it is so. In-so-far as I have followed the great observer he is always correct; certainly truthful.

TITUS ANDRONICUS ORNIS MATERNUS,
Oozamalak.

A Collecting Ladle.

On the 11th of June, '92, I had the good fortune to find a Yellow-billed Cuckoo's nest, but the nest was situated on a branch limb of a willow tree, which limb of course would split off very easily, so I contrived an apparatus, which consisted of a baking powder box cover tacked on to the end of an 8 ft. stick, thus making a crude ladle, then climbed the tree, reached out with my primitive ladle, and in a few seconds had a set of five slightly incubated eggs. This idea may be useful to collectors.

E. H. FLETCHER,
Brockton, Mass.

Ripans Tabules cure dyspepsia.

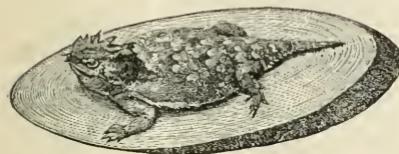
Ripans Tabules cure nausea.

List of Sets of Eggs of Warblers in the Collection of J. P. Norris, Jr.

Oct. 1, 1897.

A. O. U.	NO.	NAME.	SETS.	NO. OF SETS.	NO. OF EGGS.
636		Black and White Warbler, 2-4, 13 5.....	15		73
637		Prothonotary Warbler, 3-4, 21-5, 34-6, 15-7, 2-8.....	75		442
638		Swainson's Warbler, 8-3, 2-4, 1-5.....	11		37
639		Worm-eating Warbler, 3-3, 29-4, 51-5, 6-6.....	89		416
641		Blue-winged Warbler, 5-3, 12-4, 16-5, 1-6.....	34		149
642		Golden-winged Warbler, 4-4, 6-5.....	10		46
643		Lucy's Warbler, 1-2, 4-3.....	5		14
645		Nashville Warbler, 1-3, 5-4, 1-5.....	7		28
645a		Calaveras Warbler, 1-5.....	1		5
646a		Lutescent Warbler, 1-3, 2-4, 1-5.....	4		16
648		Parula Warbler, 1-4, 2-5.....	3		14
648a		Northern Parula Warbler, 2-2, 9-3, 21-4, 12-5, 3-7	47		196
652		Yellow Warbler, 16-3, 50 4, 28-5.....	94		388
654		Black-throated Blue Warbler, 1-3	1		3
654a		Cairns's Warbler, 4-3, 3-4.....	7		24
655		Myrtle Warbler, 3 3, 2-4, 2-5.....	7		27
656		Audubon's Warbler, 1 3, 2-4, 1-5.....	4		16
657		Magnolia Warbler, 3-3, 58-4, 1-5.....	62		246
658		Cerulean Warbler, 1-4, 1-5.....	2		9
659		Chestnut-sided Warbler, 4-3, 31-4, 2-5.....	37		146
660		Bay-breasted Warbler, 1-6.....	1		6
661		Black-poll Warbler, 1-3, 6-4, 12-5.....	19		87
662		Blackburnian Warbler, 3 4, 1-5.....	4		17
663		Yellow-throated Warbler, 1-3, 5-4, 1-5.....	7		28
664		Grace's Warbler, 1-3.....	1		3
665		Black-throated Gray Warbler, 3-4.....	3		12
666		Golden-cheeked Warbler, 2-3, 15 4.....	17		66
667		Black-throated Green Warbler, 11-4.....	11		44
671		Pine Warbler, 18-4, 2-5.....	20		82
672a		Yellow Palm Warbler, 1-4, 1-5.....	2		9
673		Prairie Warbler, 9 3, 39-4, 4-5.....	52		203
674		Oven-bird, 1-2, 14-3, 37-4, 52 5, 1-6.....	105		458
675		Water-Thrush, 2-4.....	2		8
676		Louisiana Water-Thrush, 2 4, 12-5, 1-6.....	15		74
677		Kentucky Warbler, 5-2, 18-3, 83 4, 103-5, 1-6.....	210		917
679		Mourning Warbler, 1-4.....	1		4
680		Macgillivray's Warbler, 1-3, 3-4, 1-5.....	5		20
681		Maryland Yellow Throat, 1-2, 5-3, 35-4, 5-5.....	46		182
681a		Western Yellow Throat, 7-4, 1-5	8		33
681b		Florida Yellow Throat, 2-3.....	2		6
682		Belding's Yellow Throat, 1-4.....	1		4
682.1		Mirador Yellow Throat, 1-4.....	1		4
683		Yellow-breasted Chat, 1-2, 35-3, 101-4, 2-5.....	139		521
683a		Long-tailed Chat, 1-3, 6-4, 1-5.....	8		32
684		Hooded Warbler, 6-3, 18-4.....	24		90
685		Wilson's Warbler, 3-5, 4-6.....	7		39
685a		Pileolated Warbler, 1-3, 7-4, 3-5.....	11		46
686		Canadian Warbler, 1-5.....	1		5
687		American Redstart, 6-3, 26-4, 1-5.....	33		127
688		Painted Redstart, 1-3 1-4.....	2		7
690		Red-faced Warbler, 1-4.....	1		4
Totals.....				1274	5433

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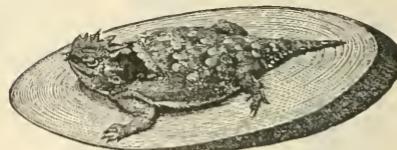
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Lark Sparrow	05
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Hooded Warbler	15
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California Thrasher	10
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California Chickadee

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